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ABSTRACT

The annotated bibliography is designed to help vocational, technical, and adult education teachers and others locate available materials on metric education. Each cited item is available from a supplier or an information system. It is organized into three sections: instructional materials, reference materials, and resource lists. The instructional materials section is organized by material type: instructor guides, student materials, and audiovisual materials. Each citation provides information on possible use; for example, educational level indicated in parenthesis at the end of each citation and content indicated in the annotation. Included in the reference materials section are items on general metrication, impact on education, metrication of business and industry, impact on consumers, international systems of units (SI), converting from customary to metric units, national and international standards, and bibliographies. The lists of resources in section 3 are designed to help the user locate organizations, publishers, suppliers, and resource persons who may be helpful in developing or selecting curriculum materials. Names, addresses, and available materials and services are given. (Author/NJ)

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Bibliography Series No. 26

METRIC EDUCATION

An Annotated Bibliography for
Vocational, Technical, and Adult Education

The Center for Vocational Education
The Ohio State University
Columbus, Ohio 43210

1974

CE 005 848

(VT-102-344)

2

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3/4

FOREWORD

Metrication is occurring in our nation. Certain sectors of society are converting more rapidly than others, with business and industry in the forefront. Some major industries have nearly completed the process, while others are rapidly following suit. Educational practices must change to accommodate these developments and to prepare students to function adequately as citizens and workers.

The Center for Vocational Education is dedicated to make useful and vital information accessible so it may be used to improve school practices. Finding and using relevant information frequently is a major task for curriculum specialists, teachers, administrators and students. This bibliography should be of assistance in meeting immediate metric education needs in vocational, technical, and adult education.

We are indebted to Gloria S. Cooper and Joel H. Magisos, co-directors of the project; to Mary Kathryne Baratta, Richard A. Dieffenderfer and Edward F. Hauck, research specialists; to Anne E. Stakelon, program assistant; and to Jacqueline Parris, project secretary, for their efforts in compiling the bibliography.

Appreciation is extended to all agencies, public and private, which cooperated by submitting materials and useful information. We especially wish to thank the NSF/RANN Metric Conversion Study, University of Minnesota; the Center for Metric Education and Studies, Western Michigan University; The National Bureau of Standards, Metric Information Office; The National Council of Teachers of Mathematics; the American National Metric Council; the ERIC Clearinghouse on Science, Mathematics and Environmental Education, The Ohio State University; The Ohio Department of Transportation, Metric Highway Project, Mechanical Engineering Department, The Ohio State University; The Cooperative Extension Service and School of Home Economics, The Ohio State University. Special thanks go to M. Eldon Schultz, Regional Program Officer, Region V, for his support and cooperation in providing leads and materials for the adult education component of our bibliography.

Robert E. Taylor
Director
The Center for Vocational Education

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INTRODUCTION

This bibliography is designed to assist vocational, technical, and adult education teachers and others locate available materials on metric education. The cited materials will help educators acquire metric skills for themselves and create learning opportunities for others. The resources in this bibliography will help the user become familiar with current metric activity and gain some sense of its impact on vocational, technical, and adult education curricula.

Organization of the Bibliography

The bibliography is organized so that teachers can find appropriate materials to meet the needs of their students. Each item is cited and annotated in a manner to help the user decide whether he wants to obtain it for actual use. Each item is available from a supplier or an information system. Materials from foreign sources were not included because of the potential difficulty users would have in obtaining them. The three sections of the bibliography are: Instructional Materials, Reference Materials and Resource Lists. These sections and several subdivisions are shown in the Table of Contents on pages v - vi.

Instructional Materials

The items in the Instructional Materials section were selected from a much larger group of materials based upon their potential for infusion in vocational, technical, and adult education curricula. Organization of the section is based upon the types of materials: instructor guides, student materials, and audio-visual materials. Each citation provides information on possible use; for example, educational level indicated in parenthesis at the end of each citation and content indicated in the annotation.

Reference Materials

The items in the Reference Materials section were selected from among available literature on various aspects of metrication based upon possible usefulness to vocational, technical, and adult educators. Included are parts on general metrication, impact on education, metrication of business and industry, impact on consumers, international system of units (SI), converting from customary to metric measurement units, national and international standards, and bibliographies.

Resource Lists

The lists of resources in Section Three are designed to help vocational, technical, and adult educators locate organization, publishers, suppliers, and resource persons who could be helpful in developing or selecting curriculum materials. Names, addresses, and kinds of materials and services are given.

Use of the Bibliography

A bibliography provides a means by which the user can identify and obtain needed materials; in other words, a bibliography is an educator's tool. This bibliography can best be used by following three simple steps: 1) finding appropriate citations, 2) examining the citations, and 3) obtaining the actual materials, if needed.

Finding the Citation

The user's first job is to find the citations (i.e., descriptions) of relevant materials. This bibliography is designed with five ways of locating citations.

1. Table of Contents
2. Educational Level Indexes
3. Title Index
4. Author Index
5. Producing Agency Index

Each of the 369 citations has its own unique number. The citations are in numerical sequence. Therefore, a citation can quickly be located once it has been identified by number.

Many will wish to browse through the 369 citations, making note of the many kinds of materials available for use. However, locating relevant materials may require a more systematic procedure. Several helpful hints are to:

1. Look in the Table of Contents (pp. v) for the location of the kinds of materials.

2. Look in the Educational Level Indexes (pp. 143) for the citation numbers of materials classified by education level, whether for occupational cluster, general, or adult basic education use.

3. Look in the Author Index (pp. 133) for the citation numbers of materials by specific authors.

4. Look in the Title Index (pp. 135) to locate the citation numbers of items by exact title.

5. Look in the Producing Agency Index (pp. 140) to locate the citation numbers of items produced by specific agencies.

The purpose of examining the indexes is to find the number of the citation in which the user is interested. Once the user has the number, the citation can be found in the bibliography.

Using the Citation

The citations in the bibliography are designed to provide the user with a description of individual items. This description assists the user in determining the potential usefulness of the actual material. It also helps in obtaining the items from a supplier or an information system.

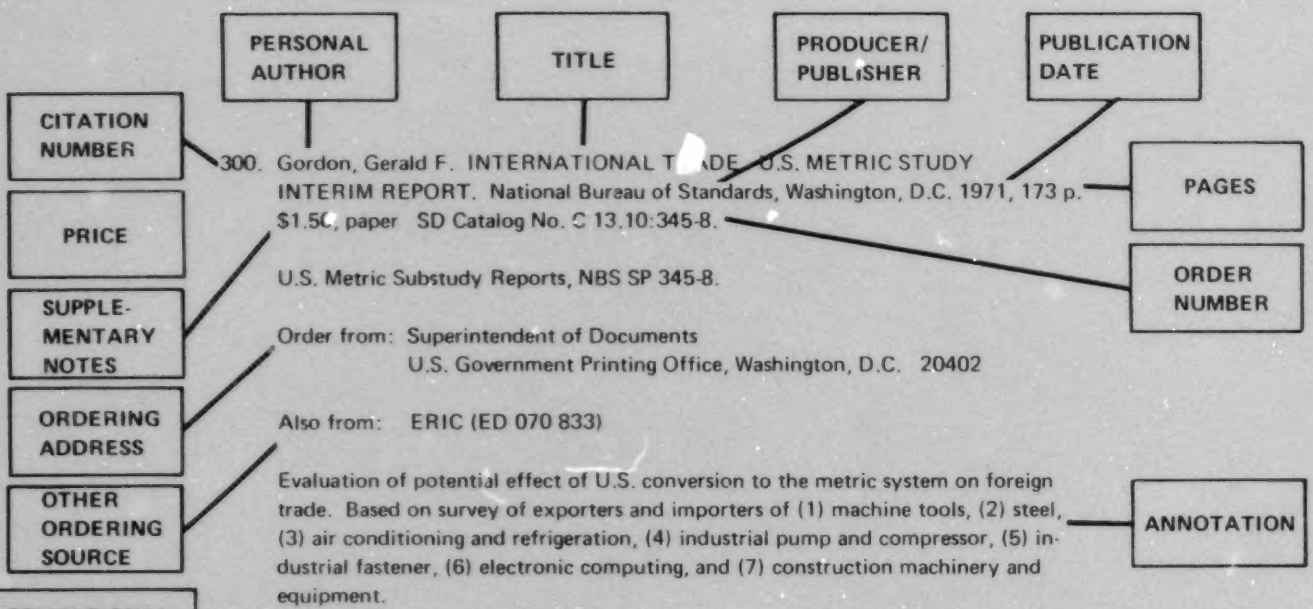
Obtaining the Materials

Once an item has been chosen, the user can obtain it from the supplier or an information system. The supplier and price, if available, is given in the citation. Some materials are free.

Some items are available as ERIC microfiche as indicated by an ED number. Assistance in using the ERIC system can be obtained from state vocational education research coordination units, ERIC Clearinghouses, many university or state libraries, or The Center for Vocational Education at The Ohio State University.

KEY TO CITATIONS

SAMPLE 1: BOOKS



300. Gordon, Gerald F. INTERNATIONAL TRADE - U.S. METRIC STUDY INTERIM REPORT. National Bureau of Standards, Washington, D.C. 1971, 173 p. $1.50, paper SD Catalog No. C 13.10:345-8.

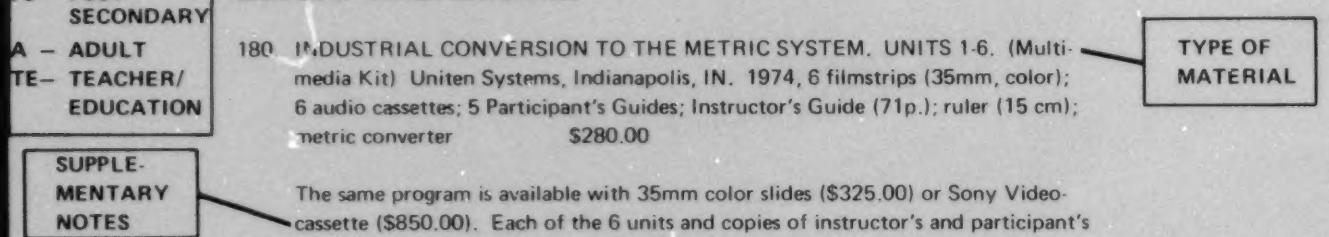
U.S. Metric Substudy Reports, NBS SP 345-8.

Order from: Superintendent of Documents
U.S. Government Printing Office, Washington, D.C. 20402

Also from: ERIC (ED 070 833)

Evaluation of potential effect of U.S. conversion to the metric system on foreign trade. Based on survey of exporters and importers of (1) machine tools, (2) steel, (3) air conditioning and refrigeration, (4) industrial pump and compressor, (5) industrial fastener, (6) electronic computing, and (7) construction machinery and equipment.
(S,PS,TE)

SAMPLE 2: OTHER MATERIALS



180. INDUSTRIAL CONVERSION TO THE METRIC SYSTEM. UNITS 1-6. (Multimedia Kit) Uniten Systems, Indianapolis, IN. 1974, 6 filmstrips (35mm, color); 6 audio cassettes; 5 Participant's Guides; Instructor's Guide (71p.); ruler (15 cm); metric converter $280.00

The same program is available with 35mm color slides ($325.00) or Sony Videocassette ($850.00). Each of the 6 units and copies of instructor's and participant's guides may be purchased separately.

Order from: Uniten Systems
246 West 34th Street Indianapolis, IN 46208
(317) 924-9214

Audio-visual program for business and industry. Program covers six topics: introduction to metric system, basic and derived units, linear measurement and precision instruments, geometric dimensioning and tolerancing, science and metrics (I, II). Stated program objectives. Teacher's Guide contains: introduction, history, objectives, tests, bibliography. Each unit is approximately 20 minutes.
(S, PS, TE)

SECTION ONE:

INSTRUCTIONAL MATERIALS

Instructional Materials are those designed for teaching and learning metric concepts. Some materials will require adaptation for local use or particular groups. This section is divided into three parts to assist the user in finding appropriate materials.

Instructor Guides lists materials which can help the teacher plan and develop metric activities. Items include objectives, suggested activities, hand-outs and worksheets to be duplicated for student use, evaluation activities, and background and resource materials.

Student Materials are those appropriate for use by secondary, post-secondary, adult basic education, and pre-service or in-service teacher education students. Self-Directed Students Materials can be used independently by students and require student activity and involvement. Listed are programed texts, workbooks, activity sheets and cards, and games. Teacher-Directed Student Materials include textbooks, booklets, and supporting publications, for student use with teacher guidance and assistance.

Audio-Visual Materials require special equipment and include films, film loops, videocassettes, filmstrips, transparencies, transparency masters, 35mm slides, audio-recordings, and multimedia kits. Also listed in this section are graphic and manipulative materials, such as charts and posters and metric converters and devices.

INSTRUCTOR GUIDES

1. Clack, Alice A.; Leitch, Carol H. AMUSEMENTS IN DEVELOPING METRIC SKILLS. Midwest Publications Co., Inc., Troy, MI. 1973, 47p. $3.75, paper

Order from: Midwest Publications Company, Inc.
P.O.Box 129, 1700 West Maple Road
Troy, MI 48084

Workbook in tear-out form adaptable to ABE students who solve various puzzles by dealing with metric units. Topics included are: linear measurement, area, mass, volume, and temperature. Section of materials for teacher includes: measurement worksheet, game and bulletin board ideas, ruler master, tables. Adaptable for reproducing or making overhead transparencies.
(A)

2. Haugaard, James; Horlock, David. CONTEMPORARY METRIC. (Kit) Prentice-Hall Learning Systems, Inc., Englewood Cliffs, NJ. 1973 1 book (30 reproducing task sheets); 3 charts; 2 binder charts
$7.95 Catalog No. 109

Order from: Prentice-Hall Learning Systems, Inc.
P.O. Box 47X, Englewood Cliffs, NJ 07632
(201) 947-1000

Metric resource materials for teachers, activities for students. Wall charts on metric place values, metric comparisons, and table of metric measures. Two reproducible binder size charts: metric place values and a table of metric measures. Thirty pages of reproducible task sheets on linear measure, perimeter, area, and addition and subtraction in metrics.
(A)

3. AN EDUCATOR'S GUIDE TO TEACHING METRICATION. Sears, Roebuck and Co., Chicago, IL. Consumer Information Services. 1974, 8p.

Free for conferences and workshops. Sears Educator Resource Series.

Order from: Consumer Information Services--D/703
Sears Roebuck and Company
Chicago, IL 60684

A general metric teacher's guide or student text for teacher education. Includes basic metric (SI) measurement units, key concepts and levels of instructional objectives in cognitive and affective domains. Suggests learning experiences, individual student activities, group projects, also projects and assignments for specific subject matter areas. Bibliography and sources of information appended.
(S, A, TE)

4. HOW TO TEACH METRIC NOW. Worcester Public Schools, MA. Metric Committee. 1973, 74p. $3.00, paper, spiral-bound

Order from: Mr. Charles Kolak
Executive Assistant for Public & Staff Information
Worcester Public Schools, 20 Irving Street
Worcester, MA 01609

Teacher's guide includes introduction, history and related changes, objectives and activities for K-12. A group of charts, tables, diagrams, and bibliography included. Objectives for senior high school in cooking, clothing, woodworking, metalworking, mechanical drawing, mechanics, electricity, electronics. Contains background and reference material.
(S)

5. Clark, Roy E. HOW TO TEACH METRIC: SOME IDEAS. National Bureau of Standards, Washington, D.C. Metric Information Office. 1st. draft, 1974, unnumbered Free

A revised version is being prepared.

Order from: Metric Information Office, National Bureau of Standards
Washington, D.C. 20234
(202) 921-2658

A collection of papers on effective ways to present the metric system. Topics include: implications of SI, changes in curriculum, metric system, strategies and activities.
(TE)

6. Pokorney, Joseph L. IMPLEMENTING METRIC MEASUREMENT UNITS IN CAREER EDUCATION PROGRAMS. (Kit) Innovative Management Systems, Inc., Northbrook, IL. 1974, p. unknown (in press); ruler (20 cm); measuring tape (150 cm); Celsius thermometer $6.50, paper

Originally published under title: Metric Measurement in Vocational and Technical Education.

Order from: Engineering Technology, Inc.
503 East Main Street, Mahomet, IL 61853

Instructional package with exercise sheets, transparency masters, and metric measuring devices. Approximately half of exercises are activity-based. "Think metric" strategy employed. Section on metric educational aids and sources. Includes worksheets and brief sections on farm operations, secretarial and clerical, transportation, nursing and health, drafting, shop practices, building trades, and home economics. Developed for Illinois Division of Vocational and Technical Education.
(S)

7. Fillinger, Louis. KNOW THE ESSENTIALS OF METRIC MEASUREMENT. BOOK I. (Duplicating Masters) Hayes School Publishing Co., Inc., Wilkinsburg, PA. 1974, 18p. and 4p. Teacher's Guide $2.50, paper Order No. A215

Order from: Hayes School Publishing Company, Inc.
321 Pennwood Avenue, Wilkinsburg, PA 15211

A series of 18 duplicating masters adaptable to ABE students. No reference to common base 10 relationships. Topics include: metre, centimetre, millimetre, kilometre, area, volume, and review. Teacher notes and answers provided. Tables of metric system for length, capacity, weight, suface measure, and cubic measures.
(A)

8. Fillinger, Louis. KNOW THE ESSENTIALS OF METRIC MEASUREMENT. BOOK II. (Duplicating Masters) Hayes School Publishing Co., Inc., Wilkinsburg, PA. 1974, 18p. and 5p. Teacher's Guide $2.50, paper Order No. A216

Order from: Hayes School Publishing Company, Inc.
321 Pennwood Avenue, Wilkinsburg, PA 15221

A series of 18 duplicating masters on metric measurement adaptable to ABE students. Extension of Book I. Requires understanding of decimals and formulas. Topics include: length, capacity, weight, surfaces and cubes, and review. Teacher's notes and answers. No comparison of English-metric systems.
(A)

9. Henderson, George L.; Glunn, Lowell D. LET'S PLAY GAMES IN METRICS. National Textbook Co., Skokie, IL 1974, 223p.

$6.25, paper; $5.00 each for 5 or more copies. Order No. 8442-3342-0.

Order from: National Textbook Company
8259 Niles Center Road, Skokie, IL 60076
(312) 679-4210

Resource book for secondary school teachers. 177 games and activities arranged according to topic and grade level. Topics covered include: history of measurement, basic units of metric measure, area, volume, and conversion from one system of units to another. Activities relate to behavioral objectives.
(S)

10. MEASUREMENT AND THE METRIC SYSTEM SCIENCE PACKET. (Kit) National Science Teachers Association, Washington, D.C. 1973, Teachers' Guide (8p.); 7 brochures (various p.); 2 rulers (30 cm each); 2 sheets cm graph paper; dm folding cube; 2 conversion cards (6.5 x 9.5 cm, 9 x 29 cm); 1 reference card $3.00, plus $.50 for postage and handling Item No. (479-14280)

Order from: National Science Teachers Association
1742 Connecticut Avenue, N.W., Washington, D.C. 20009
(202) 265-4150

Instructional aids with activities adaptable to ABE. Reference materials from many sources. Teachers' Guide includes three lesson plans for package items, section on why metric, and resource list. Well-designed module by Xerox contains: objectives, instructional procedures, four activities, evaluation, and competency measures for activities.
(A)

11. MEASUREMENT WITH METRIC. A RESOURCE HANDBOOK. Oregon State Dept. of Education, Salem. Field Test Version, 1974, 4p. Free, paper

Order from: Oregon State Department of Education
942 Lancaster Drive, N.E., Salem, OR 97310

Resource guide for workshops on metric system. Sections include: rationale for metric education, activities for diagnosis of pre-measurement skills, instructor's guide for planning and conducting workshops, activities for workshop participants, materials for program implementation, glossary of metric terms, and bibliography. "Think metric" and hands-on strategies employed.
(A, TE)

12. METRIC. Career Education Program, Salem City, NJ. Date unknown, unnumbered (56p.) $1.50, paper, spiral-bound

Order from: The Career Education Project, Salem High School
Salem, NJ 08079

Resource guide containing articles and activities on the metric system for middle and secondary students. Topics covered include: brief introduction to metrics, magazine articles on metric, approximate conversions, and metric activities.
(S, A)

13. Hinrichs, Roy S., comp. METRIC 500: INSTRUCTORS MANUAL AND STUDENT MATERIAL. Mississippi State University, Mississippi State. Research and Curriculum Unit for Vocational and Technical Education. 1974. (19 + 6p.) $2.00, paper

The 6p. Student Material is also available separately for $1.00.

Order from: Research and Curriculum Unit for Vocational-Technical Education
Drawer DX, Mississippi State, MS 39762
(601) 325-2510

Set contains instructor's manual and student directions for building a model race car using metric dimensions. Related metric information and explanation of scientific principles presented.
(S)

14. A METRIC GUIDE AND WORKSHOP PROGRAM. Orange Country Math Association/Orange County Dept. of Education, Santa Ana, CA. Date unknown, 43p. $1.00, paper

A revised version is being prepared.

Order from: Orange County Department of Education
P.O. Box 11846, Santa Ana, CA. 92711

Looseleaf, illustrated, participant's guide for a 1 ½ hour, teacher education workshop in metric education. Overviews of U.S. customary and metric systems; provides practical measurement experiences in length, mass [weight], capacity, and area; suggests classroom activities, and lists references. Describes materials and small-group workshop. Activities include a section reprinted from The Arithmetic Teacher.
(TE)

15. METRIC IS COMING! National Science Teachers Association, Washington, D.C. 1973, 6p. $.75, paper Stock No. 471-14662

A kit (containing: this guide, metric exercises, diagrams, uncalibrated thermometer tube, and a 1 gram/1 cubic centimetre plastic cube) is also available for $6.00, Stock No. 471-14664.

Order from: National Science Teachers Association
1742 Connecticut Avenue, N.W., Washington, D.C. 20009

Teacher's guide for teaching everyday units of the metric system (SI). Includes discussion on requirements of a measurement system, basic metric units and prefixes, suggested student activities, metric equivalents in general use. Relates metric units to quantity to be measured, and describes comparisons which can be used with students. Uses "think metric" strategy. Conversion table included.
(S, A)

16. Orf, Earl; Hestwood, Diana. METRIC MEASUREMENT: ACTIVITIES IN CAPACITY, MASS, AND TEMPERATURE. The Math Group Inc., Minneapolis, MN. 1974, 36p. $3.95, paper, 3 hole-punched

Order from: The Math Group Inc.
5625 Girard Avenue South
Minneapolis, MN. 55419
(612) 861-3840

Teacher's guide adaptable for ABE students. Illustrated mimeograph master activity sheets for students. Topics include: millilitres and litres, placing decimal points when converting, litre and quart, Celsius and Fahrenheit, weight and mass, grams, kilograms and milligrams. Many paper and pencil activities involving measuring, puzzles, and filling in blanks. "Think metric" strategy.
(A)

17. METRIC MEASUREMENT: ACTIVITIES IN LINEAR MEASUREMENT. The Math Group Inc., Minneapolis, MN. 1974, 36p. $3.95, paper, 3-hole punched

Order from: The Math Group Inc.
5625 Girard Avenue South
Minneapolis, MN 55419
(612) 861-3840

Teacher's guide adaptable for adults. Illustrated activity sheets for students, perforated for easy removal, intended for use in making ditto or mimeograph masters. Many paper and pencil activities involve measuring, charts, line segments in drawings, filling in blanks. Topics, terms, and symbols include kilometre, metre, centimetre, and millimetre. Teacher notes in guide provide objectives and answers. "Think metric" strategy.
(A)

18. McKinley, Clarence P. THE METRIC SYSTEM: A METHOD FOR TEACHING. Wicomico County Board of Education, Salisbury, MD. 1973, 15p. $2.00, paper

Order from: Clarence P. McKinley
Wicomico County Board of Education
Long Avenue
Salisbury, MD 21801

Outlines method for teaching metric which stresses understanding of metric system. Uses five major concepts in teaching the metric system: the U.S. monetary system is based on a decimal system; advantages of metric measurement: simplicity of metric measurement involving structured system of prefixes attached to basic units of length, mass, and volume; need for transitional conversion skills; metric temperature measurement. Contains hints to teacher, problems, and class exercises.
(S, PS, A, TE)

19. METRIC SYSTEM INSTRUCTION: AN INTERDISCIPLINARY APPROACH. Carroll County Board of Education, Westminster, MD. 1974, 157p. $6.00, paper

Order from: Dr. Larry L. Houser
Carroll County Public Schools, Box 500
Westminster, MD 21157

Teacher's guide containing instructional activity plans and student worksheets color-coded by area: language arts, mathematics, science, social studies, arts, health, home economics, industrial arts, physical education. Activities are performance-based, with evaluation. "Think metric" strategy. Lists of metric measurement and AV resource materials, directions for metric games, and bibliography appended.
(S, A, TE)

20. METRICATION FOR ENGINEERS. INSTRUCTOR'S SUPPLEMENT. Society of Manufacturing Engineers, Dearborn, MI. Date unknown, 46p. paper

Free with purchase of book, Metrication for Engineers.

Order from: Society of Manufacturing Engineers, Publications Sales
20501 Ford Road, Dearborn, MI 48128
(313) 271-1500

Instructor's guide booklet for the text Metrication for Engineers for manufacturing-engineering occupations. Advocates a "think metric" approach; suggests student measuring activities; provides practice, quiz, and review questions and solutions. Includes several metric engineering drawings.
(PS, TE)

21. METRICATION MASTERS. (Duplicating Masters) Holt, Rinehart and Winston, Inc., New York, NY. 1974, 50p. $19.98 for schools

Holt School Math Series

Order from: Holt, Rinehart and Winston, Inc.
383 Madison Avenue, New York, NY 10017
(212) 688-9100

Duplicating masters present a non-graded course on the metric system. Topics covered include: length, capacity, mass, temperature, volume, area, and perimeter. Guided discovery approach. Illustrations focus on main topic of lesson followed by a series of brief practice items. Contains applications and table of metric measures.
(S)

22. MOVING TOWARD METRIC. (Kit) J.C. Penney Co., New York, NY. Educational Relations Dept. 1974, 8 brochures (4p. each); script (8p.); chart (60 x 80 cm., color); metric slide chart (10 x 28 cm) $1.25

Single copies are available to educators at local J.C. Penney stores. Insights into Consumerism series No. 84573.

Order from: Educational Relations, J.C. Penney Company, Inc.
1301 Avenue of the Americas, New York, NY 10019

A portfolio designed to help consumers accept and understand the basics of metric system. Contents include: learning experiences with the metre, Celsius scale and the kilogram, visuals and aids for understanding metric units, and information on metrics progressing from the simple to the complex. A buying guide on permanent care labels is included.
(S, A)

23. PRACTICE IN THE METRIC SYSTEM. DUPLICATING MASTERS FOR INDIVIDUAL OR GROUP STUDY AT MIDDLE/UPPER LEVELS. (Duplicating Masters) Instructor Publications, Inc., Dansville, NY. 1973, 20 masters $4.25

Instructor Curriculum Materials, Duplicating Masters Series No. 843.

Order from: Instructor Publications, Inc.
P.O. Box 6108, Duluth, MN 55806

Teacher's guide and series of upper elementary level student worksheets adaptable for ABE students. Questions cover basic metric system units and prefixes, measurement computation and estimation, review, conversion exercises, and relationship between units.
(A)

24. Bielefeld, Carole, comp. SI . . . A METRIC WORKBOOK FOR TEACHERS OF CONSUMER & HOMEMAKING EDUCATION. Orange County Dept. of Education, Santa Ana, CA. 1973, 70p. and 35p. of transparency masters. $1.50, paper

Order from: Carole Bielefeld, Orange County Department of Education
P.O. Box 11846, Santa Ana, CA 92711

Workbook in easy-to-use format for instructors in consumer and homemaking education. Includes: brief history of metric system, transparency presentation with narration on length, volume, and mass [weight]. Has learning-by-doing exercises with pre-test and post-test.
(S)

25. Henry, Boyd. TEACHING THE METRIC SYSTEM. Weber Costello, Chicago, IL. 1974, 48p. $1.50, paper

Order from: Weber Costello
1900 N. Narragansett Avenue
Chicago, IL 60639
(312) 889-2300

Teacher's guide to metric system adaptable to ABE students. Topics include: length, area, mass [weight], liquid volume, solid volume, and temperature. Contains twenty-five hands-on activities each with stated objectives and required materials.
(A)

26. THINK METRIC. (Kit) The Ohio State University, Columbus, Cooperative Extension Service. 1973, Leader's Guide (6p.); 2 pamphlets (4p. and 4p. fold-out); 2 charts (21.5 x 28 cm each); measuring tape (150 cm); bumper sticker $.50

Order from: The Ohio State University, Cooperative Extension Service
1787 Neil Avenue, Columbus, Ohio 43210

Packet of basic materials for consumers and homemakers. Leader's guide with objectives, lesson outline, activities and problems for group use, and selected resource list. Includes pamphlet, chart, brochures from Ohio Department of Transportation and National Bureau of Standards, and metric tape measure. Guide can be used with Extension Service's Think Metric sound slide kit.
(S, A)

27. Worshtil, Diana; and others. THINK METRIC: ADAPTING TO THE METRIC SYSTEM. Toledo Public Schools, OH. 1974, 42p. $1.00, paper, spiral-bound

Availability is now limited to 100 copies in stock.

Order from: Toledo Public Schools
Manhatten & Elm, Toledo, OH 43608

Teacher's guide with activities adaptable to ABE students. Topics include: place value charts, basic SI units, prefixes, comparison of U.S. customary and metric system, sample problems for length, area, temperature, and volume, and other activities and suggestions.
(A)

28. VOLUNTARY QUINMESTER CURRICULUM GUIDE: THE METRIC SYSTEM. Rockhill School District No. 3, SC. Date unknown, 81p. $3.24, paper

Order from: Mr. Charles Hall, Director of Extended School Year
Rockhill School District No. 3
Rockhill, SC 29730

An eight-week course exploring metric system as a system of measurement beginning with brief history followed by basic units, multiples and subdivisions. Covers advantages, units of length, area, volume, capacity, temperature, mass [weight], and conversions. Supplementary texts required. Suggested activities and resources included.
(S)

STUDENT MATERIALS

Self-directed Student Materials

29. AREA PERIMETER GAME. (Game) Creative Teaching Associates, Fresno, CA. Date unknown, 1 set of playing cards $1.95 Order No. 4132

Order from: Creative Teaching Associates
P.O.Box 293
Fresno, CA 93708
(209) 251-9410

"Book" type card game provides drill activity for students on the concepts of area, perimeter, and length using metric units. Figures illustrated in metric scale.
(S)

30. Ploutz, Paul F. DECIMETER. (Game) The Lawhead Press, Inc., Athens, OH. 1974, gameboard (40 x 46 cm); Answer Key; 2 dice; 60 cm cubes; 65 Beginning Cards; 65 Advanced Cards

$11.00; $47.00 for a Classroom Set of 5 games; $86.00 for a School Set of 10 games.

Order from: The Lawhead Press, Inc.
900 East State Street, Athens, OH 45701

Game for 2-6 players which sends players shopping for items in metric length, volume, or mass [weight]. Each player makes metric decisions by comparing length, volume, or weight. Beginning and advanced questions. Each correct answer nets one centimetre cube. Ten centimetre cubes win the game.
(S, PS, A, TE)

31. Fearon, Arthur D. EVERYDAY METRICS. Willow House Publishers, Stockton, CA 1974, 32p. $2.50, paper

Discounts available with purchase of 6 or more copies. Cherrington-Fearon-Massey Series of Six Metric Books, Book 5: Grades 11, 12, 13, 14. The complete series of 6 books is available for $12.00

Order from: Willow House Publishers
P.O. Box 129, Stockton, CA 95201

Workbook for individuals interested in the metric system. Explanation followed by questions and activities. Individualized. Topics include: brief history and introduction, decimals, distance, area, volume, mass [weight], temperature, basic units, and speed of driving.
(S, PS, TE)

32. Johnson, H.N.; Roberson, M.J. EXPERIENCES IN THE METRIC SYSTEM. Paul S. Amidon & Associates, Inc., Minneapolis, MN. 1974, 61p. $2.95, paper

Metric tape measure and conversion devices provided.

Order from: Paul S. Amidon & Associates, Inc.
4329 Nicollet Avenue South, Minneapolis, MN 55409
(612) 827-2901

A ten-hour course concentrating on metre, gram, litre and appropriate prefixes and interrelationships. Students form groups of three to work through activities. Field tested on 675 students.
(S, PS, TE)

33. Kempf, Albert F.; Richards, Thomas J. EXPLORING THE METRIC SYSTEM. Laidlaw Brothers Publishers, River Forest, IL. 1973, 48p. $.48 plus shipping, paper Code No. 1411

Order from: Laidlaw Brothers Publishers
A Division of Doubleday
Thatcher and Madison
River Forest, IL 60305

Workbook adaptable for ABE students. Exercises cover topics on length, perimeter, area, volume, capacity, and mass [weight]. Self-administered tests with answers for each unit.
(A)

34. Wallace, Jesse D. GOING METRIC . . . PAL. PROGRAMMED ASSIGNED LEARNING. Jesse D. Wallace, Chico, CA 1974, 41p. and 5 tests

$1.50 each for 5 or more copies, paper

Order from: Jesse D. Wallace
1078 East 5th Avenue, Chico, CA 95926
(916) 342-4465

A 125-frame programed learning textbook for young adults and adults. Covers the seven basic SI metric units, prefixes and approved metric symbols. Other topics include: going metric in sports, homemaking, building trades, screw threads, wire sizes, body measurement, air pressure, paper, and shoe sizing. Course takes approximately one hour. Test sheets with answers. Field tested.
(S, PS, A, TE)

35. Johnson, Dale M.; VanOsdol, Bob M. HANDBOOK FOR METRIC CONVERSION. Idaho Research Foundation, Inc., Moscow, ID. 1973, 93p. $4.25, paper

Order from. Idaho Research Foundation, Inc.
University Station Box 3367
Moscow, ID 83843

A non-technical, self-instructional text on U.S. customary-metric system conversions. Topics include: introduction, length, area, volume, capacity and liquids, weight, and temperature. U.S. customary to metric conversions, metric to metric conversions, practice exercises, and solutions to practice exercises for each topic.
(S, PS, A, TE)

36. Oppert, Judy. THE HOME ECONOMICS TEACHER AND METRICS. University of Illinois, Urbana. Division of Home Economics Education. 1974, 8 lessons, approx. 80p. (in press) $44.00
Extension Course No. 339B

The course is available for credit and non-credit students. An examination is included for credit students.

Order from: Correspondence Division, 104 Illini Hall
University of Illinois at Champaign
Champaign, IL 61820

Lessons will also be published in: Illinois Teacher of Home Economics, v8, n2-5, 1974-75. $7.50 for annual subscription; $5.00 for students. $1.75 per single issue.

Order from: Illinois Teacher of Home Economics, 351 Education Building
University of Illinois, Urbana, IL 61801

Booklet or series of journal lessons on learning and teaching metrics for consumer and homemaking related occupations. Eight lessons include history and trends, length, area, volume, mass, temperature, applications to consumer and home economics subject areas, guidelines and suggested practices for teaching. Objectives self-study, activity-based, lesson evaluations with answers. Pre- and post-tests to be evaluated by correspondence instructor.
(TE)

37. Esler, William K.; Hynes, Michael C. AN INDIVIDUALIZED LABORATORY PROGRAM FOR THE METRIC SYSTEM. STUDENT'S MODULES. Kent Educational Services, Oviedo, FL. 1973, 89p.

$29.90 plus shipping for a package of 10 copies, paper.

Order from: Kent Educational Services
P.O. Box 903, Oviedo, FL 32765

Student modules individualized and adaptable to ABE students. Topics include: linear measurement, area, volume, mass, force, and temperature measurement. Activity oriented. Objective stated for each module. Tests at end of each module.
(A)

38. Esler, William K.; Hynes, Michael C. AN INDIVIDUALIZED LABORATORY PROGRAM FOR THE METRIC SYSTEM. TEACHER'S MODULES. Kent Educational Services, Oviedo, FL. 1973, 56p.

$22.90 plus shipping for a package of 10 copies, paper.

Order from: Kent Educational Services
P.O. Box 903, Oviedo, FL 32765

Seven individualized modules which are also adaptable for secondary, post-secondary, and teacher education students. Topics include: linear measurement, area, volume, mass, force, and temperature measurement. Activity oriented with objectives and self-test for each module.
(S, PS, TE)

39. Parks, E.B. INSIGHT INTO METRIC MEASUREMENT. E.B. Parks, San Jose, CA. 1973, 43p. $2.00, paper; $22.00 per dozen

Order from: Parks and Math Company
995 Idlewood Drive, San Jose, CA 95121

A twelve-lesson workbook of lab activity sheets for length measurement and geometric constructions for building skills in metric vocabulary, measurement, and math concepts. Self-instructional, student objectives are stated in the first four lessons and a check test is provided. Answers for all activities appended. Metric tape and ruler on card stock for student assembly. "Think metric" strategy employed.
(S, PS, A, TE)

40. INTRODUCING THE METRIC SYSTEM. Coronet Instructional Films, Chicago, IL. 1969, 68p.

Paper, $1.50 each for 1-24 copies; $1.20 each for over 25 copies; Class set of 25 copies, $30.00

Order from: Coronet Learning Programs
Coronet Films
65 E. South Water Street
Chicago, IL 60601

Programed textbook adaptable for ABE students. Completion time for the 10 sets is 4 hours and 54 minutes. Topics include: standard units of measurement, the metric system, metric units of length smaller than metre, metric units of length larger than metre, review of linear measurement, surface, volume, capacity, mass [weight], and review and self-test. Field tested.
(A)

41. Buckeye, Donald A. INTRODUCING THE METRIC SYSTEM WITH ACTIVITIES. Midwest Publications Co., Inc., Troy, MI. 1972, 26p. $1.50, paper

Order from: Midwest Publications Co., Inc.
P.O. Box 129
Troy, MI 48084

Workbook with 50 activities adaptable to ABE students. Topics include: linear measurement, area, volume, liquid measure, and temperature. For small group, individual, or classroom instruction. Discovery or inquiry oriented. Field tested.
(A)

42. Cynewski, Louis L. LET'S THINK METRIC. American Home Economics Association, Washington, D.C. 1974, Teacher Section (3p.); Student Section (6p.)

$2.00 for Complete Package; $3.00 for 10 copies of Student Section. HELPs Series (Home Economics Learning Packages), No. 1055

Order from: American Home Economics Association
2010 Massachusetts Avenue, N.W.
Washington, D.C. 20036

Unit designed to acquaint students with metric system. Teacher section covers: component ideas, instructional objectives, instructional approach, equipment and materials needed, pre- and post-test keys. Student section covers: learning objectives, pre- and post-tests, learning activities. Basic metric units covered include: length, mass [weight], volume, and temperature.
(S)

43. Parks, E.B. MATH WITH METRIC. SKILL BUILDING WORKBOOK. E.B. Parks, San Jose, CA. 1973, 19p. $2.00, paper; $22.00 per dozen

Order from: Parks and Math Company
954 Idlewood Drive
San Jose, CA 95121

Student workbook for building basic math vocabulary and reasoning. Nineteen one-page student activity sheets, each containing one lesson. Five pages are "metric reasoning problems" which are limited to length and mass [weight]. Answer key appended.
(S, TE)

44. Parks, E.B. MEASURING A'LA METRIC. E.B. Parks, San Jose, CA. 2d ed., 1973, 74p. $4.00, paper; $42.00 per dozen

Order from: Parks and Math Company
954 Idlewood Drive
San Jose, CA 95121
(408) 998-4082

A booklet of student activity sheets for introductory metric measurement, vocabulary, computation, and conversion of units. Activities and conversion tables are limited to length, liquid capacity, speed, mass, volume, and density. Materials are self-instructional with student objectives and check tests. Answer key appended. "Think metric" strategy generally used.
(S, A)

45. MERRY METRIC. (Game) Creative Teaching Associates, Fresno, CA. 1974, 1 gameboard; score sheets $3.50 Order No. 4129

Order from: Creative Teaching Associates
P.O. Box 293
Fresno, CA 93708

Game that reinforces the meanings of the prefixes kilo-, hecto-, deka-, deci-, centi-, and milli-, and their relationship to metres, litres, and grams.
(S)

46. METER-LITER-GRAM. (Game) Real-T-Facs, Warwick, NY. Date unknown, Playing Board (39.5 x 48 cm); 10 tokens; 2 dice; examination cards, chance cards; Instruction Book (23p.) $9.00 Order No. MG-2

Order from: Real-T-Facs
Division of Realty Facts Company
26 Overlook Drive, P.O. Drawer 449
Warwick, NY 10990

A track game with gameboard laid out in metric units. Game pieces are cubic centimetres which players advance in response to questions on metric units, symbols, terminology, unit relationships and metric arithmetic. Designed for 2-10 players. Classroom tested.
(S, PS, A, TE)

47. METRIC 21. (Playing Cards) Math Group Inc., Minneapolis, MN. 1974, 50 cards (each 6.5 x 8.5 cm) $1.50

Order from: The Math Group Inc.
5625 Girard Avenue South
Minneapolis, MN 55419
(612) 861-3840

A card game for 2 to 5 players, rules similar to Blackjack or "21." Each card contains a line segment. The object is to have the highest sum of segments without going over 21 cm.
(S, PS, A, TE)

48. Fearon, Arthur D. METRIC FUNDAMENTALS. Willow House Publishers, Stockton, CA. 1974, 32p. $2.50, paper

Discounts available with purchase of 6 or more copies. Cherrington-Fearon-Massey Series of Six Metric Books, Book 3: Grades 7, 8, 9, 10. The complete series of 6 books is available for $12.00.

Order from: Willow House Publishers
P.O. Box 129
Stockton, CA 95201

Workbook on fundamentals of metric system. Explanation followed by questions and activities. Individualized topics include: metre, litre and gram tables, metric units and symbols, decimal notation, distance, area, volume, mass [weight], temperature, and basic units.
(S, A)

49. Edwards, Charles W. METRIC LAB. (Kit) Aero Educational Products Ltd., St. Charles, IL. 1974, student practice forms (72 cards per set); practice slate; ruler (15 cm); measuring tape (100 cm); 1 cm clubes; folding cubic litre box

$49.50 for Aero Mini-Metric Lab, No. 100-6, containing: 2 sets of student practice forms; 6 practice slates; 6 rulers, 2 measuring tapes, 60 1 cm cubes; 6 folding cubic litre boxes.

$139.50 for Aero Multi-Metric Lab, No. 500-24, containing: 6 sets of student practice forms; 24 practice slates; 18 rulers; 6 measuring tapes, 180 1 cm cubes; 18 folding cubic litre boxes.

Order from: Aero Educational Products Ltd.
St. Charles, IL 60174
(312) 584-4668

Individualized, activity oriented lab for general use. Topics covered include: linear measure, liquid measure, weight and conversions. Review exercises. Teachers manual.
(S, PS, A, TE)

50. Cortese, Carol E.; Herer, Carleton G. METRIC MEASUREMENT. American Book Co., New York, NY. 1974, 60p. $1.16, paper

Order from: American Book Company
Division of Litton Educational Publishing, Inc.
450 West 33rd Street
New York, NY 10001
(212) 594-8660

Student workbook includes: history and development of measures and the metric system, length, area, volume, and mass. Students find or use metric measurements for each topic, complete a section on conversion of customary and metric units, then solve word problems. Activities include filling in blanks and charts, drawing lines, reading scales, sentence completion. Graphic illustrations. Answers appended.
(S)

51. METRIC MEASUREMENT. (Kit) Minnapolis Public Schools, MN. Mathematics Basic Skills Development Project. 1972, 10 student booklets (40p. each); 10 diagnostic tests; 20 post-tests; answer key (40p.); teacher notes (4p. and supplementary puzzles)

$7.00 plus 5% shipping. Single copies of items are not available. Order No. 40-0160.

Order from: Federal Programs Office, Minneapolis Public Schools
807 N.E. Broadway, Minneapolis, MN. 55413

Consumable booklet on metric measurement for grades 7-12 and adult basic education. Behavioral objectives, individualized, mastery learning setting. Topics include: measurement (cm, mm, m, dm), decimal forms, and conversions in metric. Pretest, 3 post tests. Field tested. Booklet is part of set of 30 under development.
(S, A)

52. [METRIC MEASURING CUP.] (Kit) Union Carbide Corp., Tuxedo, NY. Educational Aids Dept. Date unknown, 1 cup (500 ml); 4 experiments (4p. each) $7.00 for 6 kits Product Code MMC-1

Order from: The Educational Aids Department
Union Carbide Research Center
P.O. Box 363, Tuxedo, NY 10987

Kit of four lab activity guides with metric measuring cup for students in home economics or food services. Activity guides provide step-by-step directions, related information, and tables for student recording of experimental findings. Experiment topics: Characteristics of Egg White and Milk Products Foams, Effects of Formula and Preparation Procedures on Plain Pastry, Effects of Heat Treatment and Time on Egg-Starch Thickened Mixtures, Crystal Formation of Sugar Syrups. Lab measurements in metric.
(PS)

53. Helgren, Fred J. METRIC SUPPLEMENT TO SCIENCE AND MATHEMATICS. Metric Association, Inc., Waukegan, IL. Rev. 1973, 28p. $1.25, paper

Order from: Ideal School Supply Company
11000 South Lavergne Avenue, Oak Lawn, IL 60453

A workbook for secondary students adaptable to post-secondary and teacher education levels. Topics include length, area, volume, specific gravity and perimeters. Field tested in grades 7-14.
(S, PS, TE)

54. THE METRIC SYSTEM. Addison-Wesley Publishing Co., Menlo Park, CA. 1974, 95p.

Student edition: $1.50, paper, Order Code 1513. Teacher edition: $2.10, paper, Order Code 1514.

Order from: Addison-Wesley Publishing Company
School Division National Headquarters
2725 Sand Hill Road, Menlo Park, CA 94025
(415) 854-0300

Student workbook with teacher guide adaptable to ABE students. Designed to introduce the metric system, familiarize students with nomenclature, and develop measuring skills through hands-on activities. Teacher's edition furnishes process and behavorial objectives, teaching suggestions, answers, and information about suppliers and equipment.
(A)

55. Ploutz, Paul F. THE METRIC SYSTEM: A PROGRAMMED APPROACH. Charles E. Merrill Publishing Co, Columbus, OH. 1972, 122p. $2.95, paper Order No. 9057

Order from: Charles E. Merrill Publishing Company
1300 Alum Creek Drive
Columbus, OH 43216

Programed instruction workbook with answer key to word problems and suggested measuring activities. Covers customary units, background and orientation to metric system, understanding and manipulation of prefixes, linear conversion skills, and dimensions of mass and volume.
(S, PS, A, TE)

56. Cherrington, Don. METRIC WORKSHOP FOR TEACHERS. Willow House Publishers, Stockton, CA. 1974, 32p. and 8p. Instructor's Guide $2.50, paper

Discounts available with purchase of 6 or more copies. Cherrington-Fearon-Massey Series of Six Metric Books, Book 6: Teacher Training. The complete series of 6 books is available for $12.00.

Order from: Willow House Publishers
P.O. Box 129, Stockton, CA 95201

Student workbook, activity guide, and instructor's manual. Topics include: linear measure, mass, area, volume and capacity, and temperature. "Think metric" strategy. Each topic lists specific objectives, materials needed, and activities. Self-directed and self-paced, after instructor has acquired materials and set up learning stations. Instructor leads concluding discussion and administers post-test. Designed for elementary in-service teachers. Adaptable to pre-service and secondary teachers.
(TE)

57. [METRIC WORKSHOP PACKAGE] University of Missouri, Rolla, Extension Division. 1973, Reference Manual (31p.), Study Guide (43p.), 3 conversion charts (6 x 9 cm), 1 chart (16 x 25 cm) $3.00

Order from: University of Missouri–Rolla
Extension Division
Rolla, MO 65401

Study guide, "Educational Material for a Metric Workshop," and reference manual, "We Are Going Metric–Are You Ready?" Guide contains six study units on metric system: general information and relations between systems of measurement, length, area, volume and capacity, mass, temperature. Units include objectives, study programs, and exercises. Metric game, references, suppliers, and workshop evaluation appended. Suitable for 6-15 hour workshop. Field tested.
(TE)

58. METRICAT10N. (Game) Metrix Corp., Orlando, FL. 1973, playing board (51.5 x 52 cm); 4 tokens; 2 dice; 40 chips; 7 groups of bills; 12 diplomas; 15 Metricat10n cards; instructions (4p.) price on request.

Order from: Metrix Corporation
P.O. Box 19101, Orlando, FL 32814

Also from: Addison-Wesley Publishing Company
School Division National Headquarters
2725 Sand Hill Road, Menlo Park, CA 94025
(415) 854-0300

Board game for two to four players, ages ten through adult, involving travel, skill, investment, collection and chance. Metric prefixes "milli-" to "kilo-" appear on metric money. Players attempt to collect at least ten of each type of metric bill. Playing time approximately 1 hour and 20 minutes.
(S, PS, A, TE)

59. METRICATION. Penton Publishing Company, Cleveland, OH. Penton Education Division. 1974, unnumbered. $15.00, paper Order No. 12

Course includes a metric conversion slide rule. School discounts available.

Order from: Penton Education Division
Penton Plaza, Cleveland, OH 44114

Programed learning text. Course covers: discussion of metric system, reasons why conversion to metric is important to industry, pitfalls and problems that may occur, and appendix of charts and coversion aids, with a bibliography.
(PS)

60. Massey, Opai. METRICS FOR HOME USE. Willow House Publishers, Stockton, CA. 1974, 32p. $2.50, paper

Discounts available with purchase of 6 or more copies. Cherrington-Fearon-Massey Series of Six Metric Books, Book 4: Homemaking. The complete series of 6 books is available for $12.00.

Order from: Willow House Publishers
P.O. Box 129, Stockton, CA 95201

Workbook for individuals in homemaking. Explanation followed by questions and activities. Individualized topics include: introduction, home cooking, calories, shopping, cooking utensils, appliances, sewing, fabrics and patterns, furniture, recipes, rules for SI units and decimal multiples and submultiples, area, and volume.
(S, PS, A, TE)

61. Maxey, Franklyn. METRICS MADE EASY. BOOK ONE–CONVERSION IN BASIC AREA, LENGTH, LIQUID, TEMPERATURE AND WEIGHT. Instructional Fair, Inc., Grand Rapids, MI. 1973. 30p. $.98, paper

Order from: Instructional Fair, Inc.
4158 Lake Michigan Drive
Grand Rapids, MI 49504

Self-directed student workbook, grades 6-8 and adult education. Stresses conversion from U.S. customary to metric for length, volume, mass [weight], and temperature. Wide variety of everyday problems presented via a family's trip to Canada. Answers appended.
(A)

62. Maxey, Franklyn. METRICS MADE EASY. BOOK TWO–CONTINUED CONVERSION IN BASIC AREA, LENGTH, LIQUID, TEMPERATURE AND WEIGHT, AND ENRICHMENT. ALSO, METRIC TO METRIC. Instructional Fair, Inc., Grand Rapids, MI. 1973, 30p. $.98, paper

Order from: Instructional Fair, Inc.
4158 Lake Michigan Drive
Grand Rapids, MI 49504

Workbook for grades 6-8 and adult basic education. Self-directed, stresses conversion from U.S. customary to metric units and metric to metric units for length, weight, volume, and temperature. Everyday problems related to family trip to Mexico. Requires completion of conversion charts and cross-number puzzles. Answers are appended. Prerequisite knowledge of basic metric units required, Book One is suggested.
(A)

63. METRIKIT MINI-COURSE. Larry Harkness Company, Villa Park, IL. 1973, 15p. $2.95, paper

The complete Metrikit, including: this guide, measuring instruments, tools, reference and training materials, can be purchased for $41.95. Individual items in the METRIKIT are also sold separately.

Order from: Larry Harkness Company
115 N. Princeton Avenue, Villa Park, IL 60181
(312) 279-5441

Self-teaching program for learning and using metric system. Topics covered include: length, area, volume, and mass. U.S. customary to metric coversion tables.
(S)

64. Sackheim, George I.; Robins, Lewis. PROGRAMMED MATHEMATICS FOR NURSES. The Macmillan Co., New York, NY. 2d ed., 1969, 262p. $5.95, paper

Order from: The Macmillan Company
866 Third Avenue
New York, NY 10022

Programed text for nurses includes sections on metric system, conversions between metric and U.S. customary, metric and apothecary. Self-directing, self-testing, immediate reinforcement. Recycling through sections when performance is below standard. Four unit practice tests for mastery and review. Practical examples throughout.
(PS)

65. Price, Shirley S.; Price, Merle E. PROJECTS IN METRIC MEASUREMENT. SET 1: INTERMEDIATE LEVEL. (Activity Cards) Creative Teaching Press, Inc., Monterey Park, CA. 1974, 120 activity cards (10.5 x 15.5 cm each); Teacher's Guide (2p.) $5.95

Order from: Creative Teaching Press, Inc.
514 Hermosa Vista Avenue, Monterey Park, CA 91754

Box of activity cards provides information and prescribes projects in measuring or converting measures in metric for length, area, volume. Teacher's guide gives metric measure information and suggests assignment and scheduling of projects. Cards are organized according to difficulty.
(S, A)

66. PURE METRIC TASKS, LATER ELEMENTARY. METRIC PROBLEMS TO TEACH BASIC AREA, LENGTH, LIQUID, TEMPERATURE AND WEIGHT SKILLS AND CONCEPTS. (Activity Cards) Instructional Fair, Inc., Grand Rapids, MI. 1974, 32 cards (15.5 x 23 cm each) $2.50 Order No. 6025

Order from: Instructional Fair, Inc.
4158 Lake Michigan Drive, Grand Rapids, MI 49504

Self-directed activity cards stress prefixes, place value, conversions between units in the metric system, computations, and metric units for daily measures. Offers conversion tasks in area, length, liquid, temperature, and weight. Answers to problems supplied. Prerequisite knowledge of basic metric units required. Title card should be removed for use with vocational and adult students.
(S, PS, A)

67 [QUICK REFERENCE NOTEBOOK DIVIDER SET.] Real-T-Facs, Warwick, NY. 1973, 5 dividers (23 x 28 cm), 1 pamphlet (4p.)

$1.00; $.75 each for 2-5 sets; $.60 each for 6-20 sets; quantity discounts available for 21 or more sets. Order No. MUM-1.

Order from: Real-T-Facs, Division of Realty Facts Company
26 Overlook Drive, P.O. Drawer 449
Warwick, NY 10990

Metric education packet introduces basic metric units for length, area, volume, mass, and temperature. Prescribes measuring and computational activities for students and presents related vocabulary and symbols. Conversion tables for linear measure, area, volume, mass [weight], liquid, dry, and cooking measures. Includes size charts for tapping drills, wrench openings, and metric standards fits. "Think metric" strategy employed.
(S)

68. THINGS OF SCIENCE: METRIC SYSTEM KIT. (Kit) Science Service, Inc., Washington, D.C. 1973, brochure (26p.); chart (20 x 27 cm, color); pamphlet (4p.); conversion card (6.5 x 9 cm); ruler (15 cm); paper metre stick $1.00; $2.50 for 3 kits

Order from: Things of Science, Department 3-73
1719 N Street, N.W., Washington, D.C. 20036

Kit designed to provide practice in "thinking metric." Twenty-six activity oriented exercises covering length and width, area, volume, mass, temperature and a brief history of metrics. Practical applications.
(S, A)

69. Armbruster, R.O. THINK METRICS. Troubador Press, San Francisco, CA. 1974, 39p. $1.50, paper
Order No. 1501

School discounts available.

Order from: Troubador Press
126 Folsom Street, San Francisco, CA 94105
(415) 397-3717

Student workbook, practical and novel introduction to metrics for daily use. Humor, graphics, and "think metric" throughout. Includes history, basic and derived units for length, area, volume, mass, temperature, and their symbols. Uses comparisons with many common objects. Common conversions, kitchen conversions (dry and liquid measures and temperature). Cut-outs for self-study flashcards, making metre sticks and litre cylinders. Evaluation, answers.
(S, A)

70. Gilbert, Thomas F.; Gilbert, Marilyn B. THINKING METRIC. John Wiley & Sons, Inc., New York, NY. 1973, 142p. $2.95, paper

Self-Teaching Guides series.

Order from: John Wiley & Sons, Inc.
605 Third Avenue, New York, NY 10016
(212) 867-9800

A 14 to 27-hour self-instructional text. Topics include: reasons for adopting the metric system, metric terms, distance and speed, volume, mass [weight], temperature, work, power and other quantities, and conversion for those so inclined. Self-tests and answers for each chapter.
(S, PS, TE)

71. Miller, David Monroe. UNDERSTANDING THE METRIC SYSTEM. A PROGRAMED APPROACH. Allyn and Bacon, Inc., Boston, MA. 1973, 74p. $2.00, paper Order No. 563715

Order from: Allyn and Bacon, Inc.
470 Atlantic Avenue, Boston, MA 02210
(617) 482-9220

Program text for individualized instruction. 345 frames requiring an active response. Contents include: introduction to the metric system, metre, kilometre, decimetre, centimetre, and millimetre, area, volume and capacity, weight, use of conversion tables and general course review. Everyday objects and distances measured. Field tested.
(S, PS, A, TE)

72. Kempf, Albert F.; Richards, Thomas J. USING THE METRIC SYSTEM. Laidlaw Brothers, River Forest, IL. 1973, 64p. $.51 plus shipping Code No. 1412.

Order from: Laidlaw Brothers
A Division of Doubleday, Thatcher and Madison
River Forest, IL 60305

Student workbook includes word problems, measurement exercise, and conversion of measures for length, area, volume and capacity, mass and weight, and other selected units. Answers appended.
(S)

73. THE AMAZING STORY OF MEASUREMENT. (Comic Book) The Cooper Group, Apex, NC. Lufkin Co. 1973, 24p. Free, paper

Order from: The Cooper Group
Crescent-Lufkin-Nicholson-Weller
P.O. Box 728
Apex, NC 27502
(919) 362-7511

Comic book format illustrating the development of ancient and contemporary measurement system. Information on the development of the metric system and an orientation to the use of metrics. Gives historical note on the origin of Lufkin measuring devices.
(S, PS, A, TE)

74. Sellers, Robert C., ed. BASIC TRAINING GUIDE TO THE NEW METRICS AND SI UNITS. National Tool, Die and Precision Machining Association, Washington, D.C. 1972, 63p. $4.95, paper

Order from: National Tool, Die and Precision Machining Association
9300 Livingston Road, Washington, D.C. 20022

Guide to metric units. Topics covered are: new metric SI system, SI basic and derived units, units for engineers and scientists, metric micrometer, conversion factors, and conversion tables.
(S, PS, TE)

75. Ramaley, Peter B. THE BEEF CATTLE INDUSTRY AND THE METRIC SYSTEM. Wye Plantation, Queenstown, MD. 1973, 35p. $1.00, paper

Order from: Wye Plantation
Queenstown, MD 21658

Pamphlet introducing metric system to cattle breeders. Topics covered include: advantages of metric, short history of metric, changes expected in beef cattle industry, carcass data and the metric system, and how to convert.
(S, PS, A, TE)

76. DISCOVER . . . WHY METRICS. Beloit Tool Corp., South Beloit, IL. 1972, 64p. $3.00, paper

$2.75 each for 10-24 copies; $2.50 each for 25-99 copies; $2.00 each for 100-299 copies; $1.50 each for 300-499 copies.

Order from: Swani Publishing Company
Box 248, Roscoe, IL 61073

Student booklet correlating with film, "Discover . . . Why Metrics." Useful for general metric or manufacturing-related occupations. Section I is script and selected frames from film presenting fundamentals of SI metric. Section II presents metric units in depth. Section III contains engineering data, dual-dimensioning of drawings, metric screw thread nomenclature, and conversion charts.
(S, PS, TE)

77. GOING METRIC. Channing L. Bete Co., Inc., Greenfield, MA. 1974, 15p. $.25, paper

Discounts available for quantities of 100 or more

Order from: Channing L. Bete Company, Inc.
45 Federal Street, Greenfield, MA 01301

Illustrated booklet covering: what and why metric, basic units, and approximate common equivalents.
(S)

78. [GOING METRIC LEAFLET SERIES.] Dick Blick, Galesburg, IL. Date unknown, 5 leaflets (4p. each); 1 leaflet (1p., 10.5 x 15 cm) Free

Order from: Dick Blick
P.O. Box 1267, Galesburg, IL 61401

Small poly bag of illustrated leaflets for basic metric education. Simple explanations of basic metric units. Leaflets on: "Metric Weights and Measures," "The Meter," "The Liter," "The Kilogram," "Temperature," and a measure and weigh yourself chart. Includes some everyday uses and helpful points.
(S, A)

79. Buckeye, Donald A. I'M OK–YOU'RE OK. LET'S GO METRIC. Midwest Pubiications Co., Inc., Troy, MI. 1973, unnumbered $3.25, paper

Order from: Midwest Publications Company, Inc.
P.O. Box 129, 1700 West Maple Road
Troy, MI 48084

Metric experiments and activities in a workbook with tear-out sheets. Especially suitable for ABE students. Reading levels: no read, low read, medium read, high read. Topics include: linear measurement, area, volume, temperature, liquid, and mass [weight].
(A)

80. Donovan, Frank. LET'S GO METRIC. Weybright and Talley, Inc., New York, NY. 1974, 154p. $5.95

Order from: Weybright and Tallen, Inc.
750 Third Avenue
New York, NY 10017
(212) 490-1155

Book discusses the metric system, history of measurement, how and why the metric system originated, effects of metric on our lives, and how metric system works. The seven basic SI units are explained in detail.
(S, PS, A, TE)

81. Kroeze, Henry. LET'S GO METRIC. Metric Consultants, Brookfield, WI. Date unknown, unnumbered $.50, paper

Order from: Metric Consultants
21720 West North Avenue
Brookfield, WI 53005

Provides basic understanding of metric system and relationships between inch-pound and metre-gram system. Topics include: temperature, prefixes, approximate conversion factors, relationships between units, and exact conversions.
(S, PS, A, TE)

82. Parks, E.B. MATH DICTIONARY WITH METRIC EMPHASIS. E.B. Parks, San Jose, CA. 1973, 25p. $3.50, paper $35.00 per dozen

Order from: Parks and Math Company
954 Idlewood Drive, San Jose, CA 95121

Student booklet in mathematical and metric terminology. Math terms are listed with pronounciation symbols and basic definitions. Intended "to strengthen student's vocabulary, to increase their understanding of math and its meaning." Metric conversion tables are included.
(S, A)

83. Henschel, Mark. THE METRIC COOKBOOK. Mark Henschel, Chicago, IL. 1972, 12p.

Free with request accompanied by a stamped, self-addressed envelope. Originally prepared for the 1972 annual meeting of the U.S. Metric Association, Inc.

Order from: Mark Henschel, Lindblom Technical High School
6130 South Wolcott, Chicago, IL 60636

Chart of conversions and the following metric recipes: salad, chocolate roll, manicotti, meatball appetizers, green beans oriental, "Hoppy's tuna vegetables pie," Christmas roll, dream bars, meat loaf, beef stew, chicken tetrazzini, and potato pudding.
(S, PS, A, TE)

84. Moore, William. METRIC IS HERE! G.P. Putnam's Sons, New York, NY. 1974, 94p. $5.95

Order from: G.P. Putnam's Sons
200 Madison Avenue, New York, NY 10016

Covers: history and advantages of metric system, U.S. conversion problems, metric units (metre, litre, gram), their multiples and sub-multiples, and arithmetic computations. Uses "think metric" approach in everyday situations, including: sports, home cooking, map reading, and purchasing films, drugs, and other products. Includes metric recipes and suggestions for conversion in home workshop, hobbies, and crafts.
(S, A)

85. Smart, James R. METRIC MATH: THE MODERNIZED METRIC SYSTEM (SI). Brooks/Cole Publishing Co., Monterey, CA. 1974, 85p. $3.95, paper

Order from: Brooks/Cole Publishing Company
Division of Wadsworth Publishing Company, Inc.
540 Abrego Street
Monterey, CA 93940
(408) 373-0728

Definitions, concepts, and ability to change from one unit of measure to another emphasized. Topics include: development of metric system, length, mass, area and volume, additional SI units. Practice exercises on typical measurement problems and math lab activities.
(S, PS)

86. THE METRIC SYSTEM: A BASE 10 (DECIMAL) SYSTEM OF MEASUREMENT. (Chart) Sargent Welch Scientific Co., Skokie, IL. 1973, IL. 1973, (22 . 28.5 cm) color, printed both sides

$10.00 per package of 100 charts, 3-hole punched, Catalog No. MO 149-01. Also available as wall chart (74 x 107 cm): $8.75, Catalog No. MS-18786.

Order from: Sargent-Welch Scientific Company
7300 North Linder Avenue, Skokie, IL 60076
(312) 677-0600

Four-color chart for student reference. Metric units defined in scientific terms. Color-coded illustrations show metre relationships, and compares them to U.S. customary units. Includes basic and derived units, multiples, sub-multiples, prefixes. Extensive table of U.S. customary and SI metric equivalents on reverse side.
(S, PS, TE)

87. Kelly, Gerard W. METRIC SYSTEM SIMPLIFIED. Sterling Publishing Co., Inc., New York, NY. Rev. 1974, 80p. $3.95, $3.99 for Reinforced Library Edition

Order from: Sterling Publishing Company, Inc.
419 Park Avenue South, New York, NY 10016
(212) 532-7160

Book emphasizes everyday use of metrics in kitchen, on cars, and in sports. Ready reference tables, formulas and short-cuts for conversions are presented.
(S, A)

88. West, Owen L. METRICALLY SPEAKING. Media Workshop, Libertyville, IL. 1974, 33p. $2.50, paper

Order from: Media Workshop
Box 277-350, North Milwaukee Avenue
Libertyville, IL 60048

Student booklet on metric measurement. Describes units of length, volume, mass, area and cubic space, place value, and Celsius. Includes: graphic illustrations, tables, conversion factors, and computation examples for the units.
(TE)

89. Wolff, Ernst. METRICATION FOR ENGINEERS. Society of Manufacturing Engineers, Dearborn, MI. 1974, 110p.

$9.50, paper, spiral-bound. $7.50 for members of the Society. Purchase price includes Instructor's Supplement (4p.) and Examination (17p.)

Order from: Society of Manufacturing Engineers, Publications Sales
20501 Ford Road, Dearborn, MI 48128
(313) 271-1500

Fourteen-hour course manual on SI metrics for manufacturing engineers. Gives explanations and working problems. Covers metric dimensioned drawings, engineering computations, threads and gearing, and metric production. Uses examples from everyday life and engineering applications in manufacturing. Students require engineering background. Accredited by Society of Manufacturing Engineers.
(PS, TE)

90. METRICATION FOR ENGINEERS. EXAMINATION. Society of Manufacturing Engineers, Dearborn, MI. Manufacturing Engineering Certification Institute. Date unknown, 17p.

Free with purchase of book, Metrication for Engineers.

Order from: Society of Manufacturing Engineers, Publications Sales
20501 Ford Road, Dearborn, MI 48128
(313) 271-1500

Examination booklet for Metrication for Engineers. Used to grant professional credits for re-certification of manufacturing engineers. Consists of true-false and discussion questions on: "Thinking Metric," "SI Units," "Conversions," "Metric Drawings," "Metric Engineering Computations," "Threads and Gearing," and "Metric Production."
(PS, TE)

91. Turner, Rufus P. METRICS FOR THE MILLIONS. Howard W. Sams & Co., Inc., Indianapolis, IN. 1974, 96p. $3.50, paper

Order from: Howard W. Sams & Company, Inc., A. Subsidiary of ITT
4300 West 62nd Street, Indianapolis, IN 46268

Textbook on metric system for general use. Topics include: units of length, area, volume, mass and weight, and temperature. Each chapter discusses conversions and contains practice exercises. Answers to practice exercises and conversion factors appended.
(S, PS, TE)

92. Darling, Mary. METRICS IN THE KITCHEN. University of Minnesota, St. Paul. Agricultural Extension Service. 1974, 4p. $.10, paper Extension Folder No. 294-1974

A 10% discount is given with orders of 100 or more copies.

Order from: Bulletin Room, 1 Coffey Hall
University of Minnesota, St. Paul, MN 55108

Brochure on future applications of metric for food preparation in the home. Positive and practical approach. Describes five stages toward individual adoption of new practices. Discusses limited effects of metrication on food preparation, temperature, nutrition, and food shopping. Presents six basic metric units, conversion table for cooking temperatures, and metric-U.S. customary conversion table.
(S, TE)

93. METRI-KIT. (Kit) Swani Publishing Co., Roscoe, IL. Date Unknown, 6 books (various p.); 3 charts (various sizes); ruler (20 cm); measuring tape (200 cm); conversion slide $18.95

Discounts available on order of 10 or more kits. Items in the kit may also be purchased separately.

Order from: Swani Publishing Company
Box 248, Roscoe, IL 61073

Sampler of metric training aids developed by Regal Beloit includes set of wall posters, measuring devices, converter, publications: "Prepare Now for a Metric Future," "A Metric America," "USA Goes Metric," "Discover Why Metrics," and industrial supply catalogs.
(S, PS, A, TE)

94. Glaser, Anton. NEATER BY THE METER. AN AMERICAN GUIDE TO THE METRIC SYSTEM. Anton Glaser, Southhampton, PA. 1974, 112p. $6.50; $3.50, paper

Publisher pays shipping charges on pre-paid orders.

Order from: Anton Glaser
1237 Whitney Road, Southhampton, PA 18966

Non-technical textbook oriented to the needs of everyday life. Covers: distance measure, volume, mass [weight] and temperature. Part II discusses advantages: pros and cons, latest international recommendations not yet is use, American ingenuity to guide future metric practice, American cooks and weighing, and promising teaching practices. Field tested on 30 college freshmen taking non-science curricula.
(S, PS)

95. Branley, Franklyn M. THINK METRIC! Thomas Y. Crowell Co., New York, NY. 1972, 53p. $4.50

Order from: Thomas Y. Crowell Co.
666 Fifth Avenue
New York, NY 10019

Book in large print, adaptable for ABE students. Traces evolution of a uniform and exact system of measurement, history of the measurement of temperature. Metric exercises and a set of English-metric conversion charts included.
(A)

96. Kapp, Dennis "Hub." THINK METRIC. Central Instrument Co., New York, NY. 1973, 40p. $2.50, paper
Catalog No. 73TM

Order from: Central Instrument Company
900 Riverside Drive, New York, NY 10032

Also from: Martin Instrument Company
19450 Grand River Avenue, Detroit, MI 48223

Text for individuals in drafting and machine tooling. Overview of metric includes: history of measuring, understanding metric, metric prefixes, using metrics, quiz, metrication in drafting, scale reading, dual dimensioning, rules of metric dimensioning, metric in machine tools and tooling, metric planning group, conversion charts, and guide to available metric aids.
(S, PS, TE)

97. Hartsuch, Paul J. THINK METRIC NOW! A STEP-BY-STEP GUIDE TO UNDERSTANDING AND APPLYING THE METRIC SYSTEM. Follett Publishing Co., Chicago, IL 1974, 120p. $3.92

Order from: Follett Publishing Co.
1010 W. Washington Blvd.
Chicago, IL 60607
(312) 666-5858

Guide to understanding and applying metric system. Topics include: weight, length, area, volume, relating volume and weight, how hot or cold is it, learning to think metric, metric prefixes, metric-metric conversions, English-metric conversion, and using powers of ten. Problems at the end of each section, answers provided.
(S, PS, A, TE)

98. U.S.A. GOES METRIC. Beloit Tool Corp., South Beloit, IL. Rev. 1970, 54p. $2.50, paper

Discounts available on orders of 10 or more copies.

Order from: Lawani Publishing Company
Box 248, Roscoe, IL 61073

Reference booklet on basic metric measurement, methods of conversion, screw thread metrification, conversion of tolerances, and writing metric dimensions on dual-dimension drawings. Describes advantages to the machine tool industry.
(S, PS)

99. Glaser, Anton. THE USE AND UNDERSTANDING OF THE METRIC SYSTEM. INDEPENDENT STUDY BY CORRESPONDENCE: MATH 0011000. (Kit) The Pennsylvania State University, University Park. Continuing Education Dept. of Independent Study By Correspondence. 1974, study guide (34p.); textbook (112p.); ruler (30 cm); measuring tape (150 cm) $27.00

Order from: The Pennsylvania State University
Continuing Education Department of Independent Study
by Correspondence
3 Shields Building, University Park, PA 16802

Informal, non-credit, six lesson correspondence course. Covers: centimetre, litre and gram, degrees Celsius, decimalization, what is SI, changing definitions, and advice about teaching metric. Lessons divided into reading assignment, commentary, and work assignment.
(S, PS, A, TE)

100. Barbrow, Louis E. WHAT ABOUT METRIC? National Bureau of Standards, Washington, D.C. 1973, 16p. $.80, paper Stock No. 0303-01191

Order from: Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402

Also from: ERIC (ED 090 024)

A booklet on metric measurement at the secondary or adult basic education levels for consumer and homemaking related tasks. Includes charts for estimating household measurements and comparing U.S. customary and SI metric systems. Three measurement problems included.
(S, A)

101. WHAT EVERYONE SHOULD KNOW ABOUT MEASUREMENT. Channing L. Bete Co., Inc., Greenfield, MA. 1966, 13p. $1.00, paper

Discounts available for orders of 75 or more copies.

Order from: Channing L. Bete Company, Inc.
45 Federal Street, Greenfield, MA 01301

Illustrated booklet on measurement, useful for ABE students. Includes: short overview of the metric and English systems, significant figures, scientific notation, powers of ten. Shows how basic concepts of mass, length, time, area, volume, and density lead to concepts of speed, acceleration, and force. Also covers work, energy, and power.
(S, A)

102. YOUR METRIC/FACS FOR DAILY LIVING. Real-T-Facs Co., Warwick, NY. 1974, 24p. $.75, paper
Order No. YMF-1

$.60 each for orders of 12 or more copies.

Order from: Realty Facts Company
26 Overlook Drive, P.O. Drawer 449
Warwick, NY 10990
(914) 986-3133

Booklet for general use. Topics include: how present system evolved, why change, metrics in daily living, metric in the classroom, basic SI units, prefixes, relationship between units, and conversion factors. Conversion tables for linear measurement, liquid measurement, volume, mass, and area.
(S, PS, A, TE)

AUDIO-VISUAL MATERIALS

Films

103. DISCOVER . . . WHY METRICS. (Film) Beloit Tool Corp., South Beloit, IL. 1972, 14 min., 16 or 8mm, sound, color

16mm: $195.00; $175.00 for 2-5 copies; $165.00 for 6-11 copies.
8mm: $115.00; $100.00 for 2-5 copies; $ 90.00 for 6-11 copies.
Includes 10 copies of the booklet Discover . . . Why Metrics.

Order from: Swani Publishing Company
Box 248, Roscoe, IL 61073

Introduction to metric system via cartoon character Metric Mike. Emphasizes metre, litre, and gram. Covers concept of decimal numbers and use of prefixes to form decimal multiples and sub-multiples. Presents metric symbols and their use.
(S, PS, A, TE)

104. GOING METRIC IN INDUSTRY, REPORT NO. 1. (Film) British Information Services, New York, NY. Date unknown, 16 min., 16mm, sound, color

Available on loan.

Order from: British Information Services, Radio/TV Division
845 Third Avenue, New York, NY 10022

British film tells how five companies of various sizes have changed to metrics. Problems involved in conversion and advantages of metric explained.
(S, PS)

105. INTERNATIONAL SYSTEM OF UNITS. (Film) BFA Educational Media, Santa Monica, CA. 1970, 22 min., 16mm, sound, color

$250.00 for purchase; $20.00 for rental. Order No. 11165.

Order from: BFA Educational Media
2211 Michigan Avenue, Santa Monica, CA 90404

Film describes the basic standards of measurement today. After a brief introduction establishing the need for accurate measurements, the film is divided into four sections: length, mass, time and temperature. Definitions are technical.
(PS)

106. KEYS TO METRICATION NO. 1: PLANNING METRICATION. (Film) British Information Services, New York, NY. Date unknown, 17 min., 16mm, sound, color

Available on loan.

Order from: British Information Services, Radio/TV Division
845 Third Avenue, New York, NY 10022

Available for purchase, $92.40 (approx. cost), from:

Films and Television Division, Central Office of Information
Westminster Bridge Road, London SE1, England

Film for line management in British manufacturing industries. Principles of effective management of metric conversion within a firm are illustrated. Case histories. How to start and organize changeover; aspects of phasing, control and costs; staff familiarization and training, and the importance of timing.
(PS, TE)

107. KEYS TO METRICATION NO. 2: PHASING IN METRIC DESIGN. (Film) British Information Services, New York, NY. Date unknown, 15 min., 16mm, sound, color

Available on loan.

Order from: British Information Services, Radio/TV Division
845 Third Avenue, New York, NY 10022

Available for purchase, $79.20 (approx. cost) from:

Films and Television Division, Central Office of Information
Westminster Bridge Road, London SE1, England

British film summarizing how metrication affects work of engineers, designers, and draftsmen in developing company metric standards, product design modification, the interface of metric and customary parts, and projecting metric materials and parts requirements.
(PS, TE)

108. KEYS TO METRICATION NO. 3: METRIC PRODUCTION AND INSPECTION. (Film)
British Information Services, New York, NY. Date unknown, 14 min., 16mm, sound, color

Available on loan.

Order from: British Information Services, Radio/TV Division
845 Third Avenue, New York, NY 10022

Available for purchase, $79.20 (approx. cost), from:

Films and Television Division, Central Office of Information
Westminster Bridge Road, London SE1, England

British film describing shop procedures for adapting existing machines and equipment for metric-based production. Techniques include metric indexing dials, dual measurement dials, dual dimensioning of drawings, and metric conversion on the job. Emphasizes importance of properly trained inspectors and other supervisory personnel.
(PS, TE)

109. KEYS TO METRICATION NO. 4: DIMENSIONAL CO-ORDINATION. (Film)
British Information Services, New York, NY. Date unknown, 11 min., 16mm, sound, color

Available on loan.

Order from: British Information Services, Radio/TV Division
845 Third Avenue, New York, NY 10022

Available for purchase, $79.20 (approx. cost), from:

Films and Television Division, Central Office of Information
Westminster Bridge Road, London SE1, England

British film demonstrates the advantages of metrication in the building and construction industry. The standardization of dimensional units results in reducing waste of materials and greater simplicity in planning and design.
(PS, TE)

110. THE KILOGRAM. (Film) Metrication Institute of America, Northfield, IL. 1974, 10 ½ min., 16mm, sound, color

$150.00 for purchase; $15.00 for rental. Also available in 8mm or videocassette. An Introduction to the Metric System series: four films available for $650.00.

Order from: Metrication Institute of America
A Division of Perennial Education, Inc.
P.O. Box 236
Northfield, IL 60093
(312) 446-4153

Live action film planned so that viewer may feel how much a kilogram weighs and perceive the physical relationships between measures for length, volume, and weight. Weight is determined with a metre stick by calculating volume. Uses familiar objects as constant references for size and weight. Kilogram and its subdivisions are explained. Reviews and reinforces longer film, "Meters, Liters, and Kilograms."
(S, PS, A, TE)

111. LEARNING ABOUT METRIC MEASURES. (Film) BFA Educational Media, Santa Monica, CA. Date unknown, 16 min., 16mm, sound, color; with Study Guide $215.00

Order from: BFA Educational Media
2211 Michigan Avenue
Santa Monica, CA 90404

Film introduces basic concepts of metric sytem. Units of metre stick identified and defined. Covers decimetre, centimetre, millimetre, and metre. Demonstrates relationship of metric system to decimal system. Study guide provides suggestions for discussion.
(S)

112. LET'S GO METRIC. (Film) Metric Consultants, Brookfield, WI. Date unknown, 20 min., 16mm, sound, color

$190.00 for purchase; $30.00 for rental. Order No. 414786 6094. Guide to film available for $.50.

Order from: Metric Consultants
21720 West North Avenue, Brookfield, WI 53005

Uses charts and illustrations to convert from inch-pound to metre-gram system. Distance, weight, volume, temperature, and brief history are covered.
(S)

113. THE LITER. (Film) Metrication Institute of America, Northfield, IL. 1974, 6 min., 16mm, sound, color

$90.00 for purchase; $9.00 for rental. Also available in 8mm or videocassette. An Introduction to the Metric System series: four films available for $650.00.

Order from: Metrication Institute of America
A Division of Perennial Education, Inc.
P.O. Box 236
Northfield, IL 60093
(312) 446-4153

Live action film discusses the litre as a metric measure of volume. Development of the litre from a cubic decimetre and the millimetre from a cubic centimetre is presented. The capacity of a litre is illustrated with a variety of common products. Screen overprints used to calculate volume. Reviews and reinforces longer film, "Meters, Liters, and Kilograms."
(S, PS, A, TE)

114. MEASURING WITH METERS, OR, HOW TO WEIGH A GOLD BRICK WITH A METER-STICK. (Film) Metrication Institute of America, Northfield, IL. 1974, 23 min., 16mm, sound, color

$310.00 for purchase; $31.00 for rental. Also available in 8mm or videocassette. An Introduction to the Metric System series: four films available for $650.00.

Order from: Metrication Institute of America
A Division of Perennial Education, Inc.
P.O. Box 236
Northfield, IL 60093
(312) 446-4153

Both introduction and summary of the content presented in series films "The Meter," "The Liter," and "The Kilogram." Development of metre, litre, and kilogram and the inter-relationship between these units is described and extensively illustrated. The calculations for measurement problems and proper symbols for measurement values are presented on screen overprints. Easy to follow film illustrations.
(S, PS, A, TE)

115. THE METER. (Film) Metrication Institute of America. Northfield, IL. 1974, 10 ½ min., 16mm, sound, color

$150.00 for purchase; $15.00 for rental. Also available in 8mm or videocassette. An Introduction to the Metric System series: four films available for $650.00.

Order from: Metrication Institute of America
A Division of Perennial Education, Inc.
P.O. Box 236
Northfield, IL 60093
(312) 446-4153

Live action film planned so that viewer can see how long a metre is. Uses series of objects alongside a metre stick to provide size reference. Screen overprints demonstrate numerical computations and symbols for multiples and sub-multiples of metre. Also clearly specifies decimal relationships by using many examples.
(S, PS, A, TE)

116. METER, LITER, AND GRAM. (Film) BFA Educational Media, Santa Monica, CA. 1972, 13 min., 16mm, sound, color $170.00

Order from: BFA Educational Media
2211 Michigan Avenue
Santa Monica, CA 90404

Introduces the three basic units of the metric system: metre, litre, and gram with multiples and sub-multiples. Illustrates how units of weight, volume, and linear measurement are related and based on metre.
(S)

117. A METRIC AMERICA. (Film) Aims Instructional Media Services, Inc., Hollywood, CA. 1973, 16 min., 16mm, sound, color

$230.00 for purchase; $20.00 for rental. Code No. 9345.

Order from: Aims Instructional Media Services, Inc.
P.O. Box 1010, Hollywood, CA 90028
(213) 467-1171

An animated presentation of the metric system and its advantages with straight-forward, light-hearted approach. Topics include: need for a standardized measurement system, state of the art, length, weight, volume, temperature, industries that use metric, and prefixes. Decimal nature of the metric system is repeatedly stressed.
(S, PS, A, TE)

118. A METRIC AMERICA. (Film) National Bureau of Standards, Washington, D.C. 1971, 35 min., 16mm, sound, color

Available on loan.

Order from: Office of Information Activities
National Bureau of Standards
U.S. Department of Commerce
Washington, D.C. 20234

Film summarizing the issues and concerns identified in the U.S. Metric Study. Presents advantages of SI metric system and background information supporting recommendations for metric adoption. Topics: hard and soft conversion, development of engineering standards, metric planning needs, and cost/benefits of metrication.
(S, PS, TE)

119. THE METRIC SYSTEM. (Film) Coronet Instructional Media, Chicago, IL. Date unknown, 11 min., 16mm, sound, color; with Teacher's Guide $130.00 Order No. 1090

Order from: Coronet Instructional Media
65 East South Water Street
Chicago, IL 60601

History of metric system and its uses today. Illustrates basic units, comparison of English and metric units and advantages of computing with metric units.
(S)

120. THE METRIC SYSTEM: PART I. (Film) Visual Instruction Productions, New York, NY. Rev. 1972, 12 ½ min., 16mm, sound, color

$150.00 for purchase; $20.00 for rental. Order No. MS-9, Part I. Also available in Super 8mm or videocassette.

Order from: Visual Instruction Productions
A Department of Victor Kayfetz Productions, Inc.
295 West Fourth Street, New York, NY 10014

Part I presents brief historical background on measurement systems and basic orientation to metric. Focus: metre, litre, kilogram, the decimal base of metric system, and use of prefixes. Comparisons made between U.S. customary and metric. Uses metric measures in practical situations.
(S)

121. THE METRIC SYSTEM: PART II. (Film) Visual Instruction Productions, New York, NY. Rev. 1972, 12 ½ min., 16mm, sound, color

$150.00 for purchase; $20.00 for rental. Order No. MS-9, Part II. Also available in Super 8mm or videocassette.

Order from: Visual Instruction Productions
A Department of Victor Kayfetz Productions, Inc.
295 West Fourth Street
New York, NY 10014

A film for industrial arts students on length, mass, and volume. Topics include: short lengths (centimetre, millimetre, decimetre), long lengths (kilometre, hectometre, dekametre), mass (kilogram, decigram, centigram, milligram, metric ton), volume (litre, decilitre, centilitre, millilitre, kilolitre, hectolitre, dekalitre), and correct way of writing metric notation.
(S)

122. METRIC SYSTEM NO. 1: HISTORY OF MEASUREMENT. (Film Loop) Visual Instruction Productions, New York, NY. 1972, 3½ min., Super 8mm, color $20.00 Order No. SMS-9A

Order from: Visual Instruction Productions
A Department of Victor Kayfetz Productions, Inc.
295 West Fourth Street
New York, NY 10014

Brief history of measurement systems from ancient times to modern metric system, showing the need for a universally accepted measuring system. Scenes and illustrations taken from VIP film "The Metric System: Part I."
(S)

123. METRIC SYSTEM NO. 2: ITS ADVANTAGES. (Film Loop) Visual Instruction Productions, New York, NY. 1972, 3½ min., Super 8mm, color $20.00 Order No. SMS-9B

Order from: Visual Instruction Productions
A Department of Victor Kayfetz Productions, Inc.
295 West Fourth Street
New York, NY 10014

Basic units for length (metre), mass (kilogram), and volume (litre), and some of prefixes used for multiples and sub-multiples. Scenes and illustrations taken from VIP film "The Metric System: Part I."
(S)

124. METRIC SYSTEM NO. 3: DECIMAL CALCULATING. (Film Loop) Visual Instruction Productions, New York, NY. 1972, 3½ min., Super 8mm, color $20.00 Order No. SMS-9C

Order from: Visual Instruction Productions
A Department of Victor Kayfetz Productions, Inc.
295 West Fourth Street
New York, NY 10014

Shows metrics as decimal system and its multiples. Using U.S. money as an illustration, shows how decimals are easier to use than fractions in making calculations. Scenes and illustrations taken from "The Metric System: Part I."
(S)

125. METRIC SYSTEM NO. 4: ENGLISH & METRIC LENGTHS. (Film Loop) Visual Instruction Productions, New York, NY. 1972, 3½ min., Super 8mm, color $20.00 Order No. SMS-9D

Order from: Visual Instruction Productions
A Department of Victor Kayfetz Productions, Inc.
295 West Fourth Street
New York, NY 10014

U.S. customary and metric standard lengths compared. Includes: yard versus metre, inches versus centimetres, and miles versus kilometres. Scenes and illustrations taken from VIP film "The Metric System: Part I."
(S)

126. METRIC SYSTEM NO. 5: ENGLISH & METRIC WEIGHT & VOLUME. (Film Loop) Visual Instruction Productions, New York, NY. 1972, 3½ min., Super 8mm, color $20.00 Order No. SMS-9E

Order from: Visual Instruction Productions
A Department of Victor Kayfetz Productions, Inc.
295 West Fourth Street
New York, NY 10014

U.S. customary and metric weights and volumes are compared. Includes: pound versus kilogram, ounce versus gram, and quart versus litre. Scenes and illustrations taken from VIP film "The Metric System: Part I."
(S)

127. METRIC SYSTEM NO. 6: SHORT LENGTHS. (Film Loop) Visual Instruction Productions, New York, NY. 1972, 3½ min., Super 8mm, color $20.00 Order No. SMS-9F

Order from: Visual Instruction Productions
A Department of Victor Kayfetz Productions, Inc.
295 West Fourth Street
New York, NY 10014

Metre and its division into decimetres, centimetres, and millimetres. Uses sample woodworking plan to measure and mark length in centimetres. Scenes and illustrations taken from VIP film "The Metric System: Part II."
(S)

128. METRIC SYSTEM NO. 7: LONG LENGTHS. (Film Loop) Visual Instruction Productions, New York, NY. 1972, 3½ min., Super 8mm, color $20.00 Order No. SMS-9G

Order from: Visual Instruction Productions
A Department of Victor Kayfetz Productions, Inc.
295 West Fourth Street
New York, NY 10014

Metric long length measurements using map reading and space exploration. Prefixes for large multiples of length are shown and defined. Scenes taken from VIP film "The Metric System: Part II."
(S)

129. METRIC SYSTEM NO. 8: WEIGHT. (Film Loop) Visual Instruction Productions, New York, NY. 1972, 3½ min., Super 8mm, color $20.00 Order No. SMS-9H

Order from: Visual Instruction Productions
A Department of Victor Kayfetz Productions, Inc.
295 West Fourth Street
New York, NY 10014

Uses water to demonstrate one kilogram. Shows uses of metric mass in recipes and medicines. Chemical formula calls for 8.2 grams which is weighed on pan balance. Scenes taken from VIP film "The Metric System: Part II."
(S)

130. METRIC SYSTEM NO. 9: VOLUME. (Film Loop) Visual Instruction Productions, New York, NY. 1972, 3½ min., Super 8mm, color $20.00 Order No. SMS-9I

Order from: Visual Instruction Productions
A Department of Victor Kayfetz Productions, Inc.
295 West Fourth Street
New York, NY 10014

Defines litre, a measure of volume, as a cubic decimetre. One litre is shown to be about four cupfuls, 800 millilitres are measured for a metric formula. Based on VIP film, "The Metric System: Part II."
(S)

131. METRIC SYSTEM NO. 10: REVIEW & TEST—UNITS & READINGS. (Film Loop) Visual Instruction Productions, New York, NY. 1972, 3½ min., Super 8mm, color $20.00 Order No. SMS-9J

Order from: Visual Instruction Productions
A Department of Victor Kayfetz Productions, Inc.
295 West Fourth Street
New York, NY 10014

Asks viewer to name various basic metric units and identify several metric measurements. Film allows about five seconds for viewer to answer, then gives answer.
(S)

132. METRIC SYSTEM NO. 11: REVIEW & TEST—PREFIXES. (Film Loop) Visual Instruction Productions, New York, NY. 1972, 3½ min., Super 8mm, color $20.00 Order No. SMS-9K

Order from: Visual Instruction Productions
A Department of Victor Kayfetz Productions, Inc.
295 West Fourth Street
New York, NY 10014

Asks viewer to identify various metric prefixes for multiples and sub-multiples, then gives each answer in turn about five seconds later. Also reviews chart of prefixes.
(S)

133. METRIC SYSTEM NO. 12: REVIEW & TEST—GENERAL USE. (Film Loop) Visual Instruction Productions, New York, NY. 1972, 3½ min., Super 8mm, color $20.00 Order No. SMS-9L

Order from: Visual Instruction Productions
A Department of Victor Kayfetz Productions, Inc.
295 West Fourth Street
New York, NY 10014

Shows metric measurement in everyday use. Asks viewer to name basic metric unit of measurement then gives answer.
(S)

134. MEASURE TO MEASURE. (Videocassettes) Central Virginia Educational Television at WCVE-TV, Richmond, VA. 1974, 6 videocassettes 15 min. each, sound, color; Teacher's Guide (11p.)

Contact ordering source for price schedules for purchasing or leasing materials.

Order from: Great Plains National Instructional Television Library
Box 80669, Lincoln, NE 68501

Metric education video series consisting of five 15-minute programs for intermediate through adult and one 15-minute teacher in-service program. Series covers development of early measurement systems, development and spread of SI metric system, explanation of metric units and their use, and application of metric units to everyday life. In-service program assists teachers in planning. Teacher's Guide provided.
(S, PS, A, TE)

135. MEASURE TO MEASURE. AN IN SERVICE PROGRAM. (Videocassette) Central Virginia Educational Television at WCVE-TV, Richmond, VA. 1974, 15 min., sound, color

Contact ordering source for price schedules for purchasing or leasing materials.

Order from: Great Plains National Instructional Television Library
Box 80669, Lincoln, NE 68501
(402) 467-2502

Presents an overview of the five lesson "Measure to Measure" series to provide orientation and planning for use of material. Excerpts from each lesson, with an introduction covering current metric developments in the United States. Includes suggested classroom follow-up activities.
(TE)

136. MEASURE TO MEASURE. LESSON1: THREE BARLEYCORNS EQUAL AN INCH. (Videocassette) Central Virginia Educational Television at WCVE-TV, Richmond, VA. 1974, 15 min., sound, color

Contact ordering source for price schedules for purchasing or leasing materials.

Order from: Great Plains National Instructional Television Library
Box 80669
Lincoln, NE 68501
(402) 467-2502

Explains need for measurement and traces development of some customary units of measurement. Emphasizes logic of metric system. Teacher's Guide lists lesson performance objectives and suggests classroom activities.
(S, PS, TE, A)

137. MEASURE TO MEASURE. LESSON 2: THE BIRTH OF A SYSTEM. (Videocassette) Central Virginia Educational Television at WCVE-TV, Richmond, VA. 1974, 15 min., sound, color

Contact ordering source for price schedules for purchasing or leasing materials.

Order from: Great Plains National Instructional Television Library
Box 80669
Lincoln, NE 68501
(402) 467-2502

Traces development of metric system in France to current worldwide usage of SI. Emphasizes historical development of metric system. Introduces base units of System Internationale (SI). Teacher's Guide lists lesson performance objectives and suggested classroom activities.
(S, PS, A, TE)

138. MEASURE TO MEASURE. LESSON 3: 'KILO' SOUNDS GREEK TO ME. (Videocassette) Central Virginia Educational Television at WCVE-TV, Richmond, VA. 1974, 15 min., sound, color

Contact ordering source for price schedules for purchasing or leasing materials.

Order from: Great Plains National Instructional Television Library
Box 80669
Lincoln, NE 68501
(402) 467-2502

Introduces metric prefixes. Explains formation of "measurement words" from combinations of unit names and prefixes. Metric base units reviewed. Teacher's Guide lists lesson performance objectives and suggested classroom activities.
(S, PS, A, TE)

139. MEASURE TO MEASURE. LESSON 4: METRIC: LESS HECTIC. (Videocassette) Central Virginia Educational Television at WCVE-TV, Richmond, VA. 1974, 15 min., sound, color

Contact ordering source for price schedules for purchasing or leasing materials.

Order from: Great Plains National Instructional Television Library
Box 80669
Lincoln, NE 68501
(402) 467-2502

Explains relationships among metric units and use of decimal point. Reviews prefixes. Teacher's Guide lists lesson performance objectives and suggested classroom activities.
(S, PS, A, TE)

140. MEASURE TO MEASURE. LESSON 5: MEASURING UP TO TOMORROW. (Videocassette) Central Virginia Educational Television at WCVE-TV, Richmond, VA. 1974, 15 min., sound, color

Contact ordering source for price schedules for purchasing or leasing materials.

Order from: Great Plains National Instructional Television Library
Box 80669
Lincoln, NE 68501
(402) 467-2502

Presents an entertaining look at some changes in near future because of metric. Characters, "Meter Maid," "Young Dr. Kilogram," and "French Gourmet," illustrate changes in daily routine. Teacher's Guide lists lesson performance objectives and suggested classroom objectives.
(S, PS, A, TE)

141. THE METRIC SYSTEM. (Videocassettes) Mississippi Authority for Educational Television, Jackson. 1974, 15 videocassettes (20 min. each, sound, color); Teacher's Guide (27p.)

Lessons 1-10 are now available and Lessons 11-15 will be released in February 1975. Contact ordering source for price schedules for purchasing or leasing materials.

Order from: Great Plains National Instructional Television Library
Box 80669
Lincoln, NE 68501
(402) 467-2502

Lively videotape series, consisting of fifteen 20-minute programs. Each lesson represents compressed day of programming by mythical Metric Broadcasting System. Series of "mini-programs" including Metric News, A Moment of Music, Metric Man, Harvey and the Professor, Centimeter Street, Metric Arts and Crafts, with musical segments in each lesson. Detailed Teacher's Guide lists pre- and post-test, teaching aids, review, and follow-up activities for each lesson.
(S, PS, A)

142. THE METRIC SYSTEM. LESSON 1: INTRODUCING THE METRIC SYSTEM. (Videocassette) Mississippi Authority for Educational Television, Jackson. 1974, 20 min., sound, color

Contact ordering source for pirce schedules for purchasing or leasing materials.

Order from: Great Plains National Instructional Television Library
Box 80669
Lincoln, NE 68501
(402) 467-2502

Presents meaning of measurement, metres, litres, and grams, System Internationale (SI), metric as a decimal system, basic units of metric measure, and use of selected prefixes. Suggested lesson follow-up activities are listed in the Teacher's Guide.
(S, PS, A)

143. THE METRIC SYSTEM. LESSON 2: WHAT IS THE METRIC SYSTEM? (Videocassette) Mississippi Authority for Educational Television, Jackson. 1974, 20 min., sound, color

Contact ordering source for price schedules for purchasing or leasing materials.

Order from: Great Plains National Instructional Television Library
Box 80669
Lincoln, NE 68501
(402) 467-2502

Explains metres, litres, and grams, decimal systems and precision in measurement, need for standardized systems of measurement, worldwide communication problems, and use of appropriate units for various measurement tasks. Has follow-up activities in Teacher's Guide.
(S, PS, A)

144. THE METRIC SYSTEM. LESSON 3: METRIC UNITS OF LENGTH. (Videocassette) Mississippi Authority for Educational Television, Jackson. 1974, 20 min., sound, color

Contact ordering source for price schedules for purchasing or leasing materials.

Order from: Great Plains National Instructional Television Library
Box 80669
Lincoln, NE 68501
(402) 467-2502

Emphasizes common units of metric length. Introduces dekametre and hectometre. Illustrates uses of millimetre, centimetre, metre, and kilometre in several activities. Reviews decimal system and precision in measurement. Teacher's Guide describes activities for student application of the measurement content.
(S, PS, A)

145. THE METRIC SYSTEM. LESSON 4: METRIC UNITS OF WEIGHT. (Videocassette) Mississippi Authority for Educational Television, Jackson. 1974, 20 min., sound, color

Contact ordering source for price schedules for purchasing or leasing materials.

Order from: Great Plains National Instructional Television Library
Box 80669
Lincoln, NE 68501
(402) 467-2502

Presents gram as basic or "naming" unit of weight, while establishing kilogram as commonly used unit. Covers basic facts in using degrees Celsius. Several weight estimation activities illustrated with an estimation exercise. Teacher's Guide activities cover content review, concept of density, estimating measure, and degrees Celsius.
(S, PS, A)

146. THE METRIC SYSTEM. LESSON 5: METRIC UNITS OF VOLUME. (Videocassette) Mississippi Authority for Educational Television, Jackson. 1974, 20 min., sound, color

Contact ordering source for price schedules for purchasing or leasing materials.

Order from: Great Plains National Instructional Television Library
Box 80669
Lincoln, NE 68501
(402) 467-2502

Introduces litre. Reviews concepts of linear measurement, area, and volume. Develops litre from the cubic decimetre. Teacher's Guide includes making decimetre cube, estimating volume equivalents, drawing metric sized figures.
(S, PS, A)

147. THE METRIC SYSTEM. LESSON 6: PREFIXES. (Videocassette) Mississippi Authority for Ecucational Television, Jackson. 1974, 20 min., sound, color

Contact ordering source for price schedules for purchasing or leasing materials.

Order from: Great Plains National Instructional Television Library
Box 80669
Lincoln, NE 68501
(402) 467-2502

Use of metric prefixes milli-, centi-, deci-, deka-, hecto-, and kilo- with basic units metre, litre, and gram. Explains proper use of symbols. Teacher's Guide has activities and games for drill and practice.
(S, PS, A)

148. THE METRIC SYSTEM. LESSON 7: THE SYSTEM IS BASED ON 10. (Videocassette) Mississippi Authority for Educational Television, Jackson. 1974, 20 min., sound, color

Contact ordering source for price schedules for purchasing or leasing materials.

Order from: Great Plains National Instructional Television Library
Box 80669
Lincoln, NE 68501
(402) 467-2502

Covers metric prefixes and decimal system. Illustrates multiplication by 10 and general rules for movement of decimal point. Teacher's Guide reviews use of prefixes and decimals.
(S, PS, A)

149. THE METRIC SYSTEM. LESSON 8: IT'S ALL BASED ON THE METER. (Videocassette) Mississippi Authority for Educational Television, Jackson. 1974, 20 min., sound, color; Teacher's Guide (27p.)

Contact ordering source for price schedules for purchasing or leasing materials.

Order from: Great Plains National Instructional Television Library
Box 80669
Lincoln, NE 68501
(402) 467-2502

Shows relationships of commonly used metric units. Includes summary of historical development of metric system. Illustrates computation of area for small things and use of hectare for measuring land area. Activities and review of SI terms and symbols in Teacher's Guide.
(S, PS, A)

150. THE METRIC SYSTEM. LESSON 9: USING THE METRIC SYSTEM EVERYDAY. (Videocassette) Mississippi Authority for Educational Television, Jackson. 1974, 20 min., sound, color

Contact ordering source for price schedules for purchasing or leasing materials.

Order from: Great Plains National Instructional Television Library
Box 80669
Lincoln, NE 68501
(402) 467-2502

Emphasizes increasing use and convenience of metrics in daily life. Reviews use of SI symbols, computation of cubic measures, the second as a non-decimal unit for time, and temperature in degrees Celsius. Teacher's Guide includes: metric crossword puzzle, concerns for spelling of terms, and suggestions for displays and student activities.
(S, PS, A)

151. THE METRIC SYSTEM. LESSON 10: WHAT DO WE KNOW ABOUT THE METRIC SYSTEM? (Videocassette) Mississippi Authority for Educational Television, Jackson. 1974, 20 min., sound, color

Contact ordering source for price schedules for purchasing or leasing materials.

Order from: Great Plains National Instructional Television Library
Box 80669
Lincoln, NE 68501
(402) 467-2502

Summarizes first nine lessons of the series. Units covered include metre, litre, kilogram, temperature and metric prefixes and symbols. Follow-up activities in Teacher's Guide includes ideas for review, student projects, and games.
(S, PS, A)

152. METRICATION VIDEO-TAPE NO. 1. THE MODERNIZED METRIC SYSTEM, THE INTERNATIONAL SYSTEM OF UNITS–SI. (Videotape) Honeywell, Inc., Fort Washington, PA. Process Control Division. 1974. 59 min., sound, color $500.00

Includes 25 sets of 13 worksheets. Available in either 1/2" or 3/4" cassette.

Order from: R.O. Winter, Principal Standards Engineer
Honeywell Process Control Division
1100 Virginia Drive, MS 213, Fort Washington, PA 19034
(215) 643-1300, ext. 421

Business and industry training session designed for technician and engineering staff personnel. Reviews SI units, symbols, and terminology. Thirteen topics presented with time intervals after each topic for completion of review worksheet. Covers metre, square metre, kilogram, ampere, kelvin, newton, pascal, joule, density, torque, and viscosity.
(PS)

153. METRICATION VIDEO-TAPE NO. 2. THE MODERNIZED METRIC SYSTEM, THE INTERNATIONAL SYSTEM OF UNITS–SI. (Videotape) Honeywell, Inc., Fort Washington, PA. Process Control Division. 1974, 18 min., sound, color $250.00

Includes 25 sets of worksheets. Available in either 1/2" or 3/4" cassette.

Order from: R.O. Winter, Principal Standards Engineer
Honeywell Process Control Division
1100 Virginia Drive, MS 213, Fort Washington, PA 19034
(215) 643-1300, ext. 421

Business and industry training session for secretarial and clerical personnel, focusing on writing, typing, and printing of SI units and symbols. Covers basic SI and supplementary units, prefixes, use on non-SI units, and derived units. Worksheet summarizes information. Includes review questions.
(S, PS)

154. CHANGING TO METRIC. (Filmstrip) Visual Education Consultants, Inc., Madison, WI. [1974], 42 frames, 35mm, b&w or color; Teacher's Guide (16p.)

$5.00 for b&w; $7.50 for color.

Order from: Visual Education Consultants, Inc.
P.O.Box 52, Madison, WI 53701
(608) 836-6565

42-frame filmstrip with captions and guide, introducing the metric system and its history. Guide includes key vocabulary words and definitions, supplementary information, student activities, and a review quiz.
(A)

155. HISTORY OF THE MEASUREMENT OF LENGTH. (Filmstrip) Visual Education Consultants, Inc., Madison, WI. Date unknown, 32 frames, 35mm, b&w; Teacher's Guide (9p.) $5.00 Order No. 1475

Order from: Visual Education Consultants, Inc.
P.O. Box 52
Madison, WI 53701
(608) 836-6565

Filmstrip discusses the history of measurement including use of lightwaves as a measuring standard. Explains why accurate standards of measurement are vital. Teacher's Guide contains quiz, vocabulary words, and related activities.
(S)

156. GOING METRIC. (Transparency Masters) Western Michigan University, Kalamazoo, MI. Center for Metric Education. 1974, 7 sets of transparency masters (total of 162) with Notes and Comments for each set and supplementary materials.

These materials are available through the industrial education departments of teacher education institutions in each of the states.

Packaged sets of transparency masters and teacher scripts for teacher educators. Individual sets for basic metric education, and selected vocational education program areas includes: Metric for Career Education, Metric for Students, Drafting, Graphic Arts, Metalworking, Woodworking and Building Construction, and Course of Study and Tool Kits. "Going Metric for Students" contains printed materials only. Includes reference material, programed unit in metric measurement, worksheets, and instructor's notes.
(TE)

157. GOING METRIC–COURSE OF STUDY AND TOOL KITS. (Transparency Masters) Western Michigan University, Kalamazoo, MI. Center for Metric Education. 1974, 3 transparency masters; Outline (10p.); 3 metric tool lists.

These materials are available through the industrial education departments of teacher education institutions in each of the states.

Course outline for metric measurement and ISO standards, for industrial arts teacher educators in drafting, metalworking, woodworking, or graphic arts; with plans and specifications for metric tool kits for drafting, general metals, machine shop, and woodworking. Plans for metric materials carrying case on transparency masters. Bibliography of resource materials attached.
(TE)

158. GOING METRIC FOR CAREER EDUCATION. (Transparency Masters) Western Michigan University, Kalamazoo, MI. Center for Metric Education. 1974, 45 transparency masters; Notes and Comments (5p.)

These materials are available through the industrial education departments of teacher education institutions in each of the states.

Kit of transparency masters and teacher's script for industrial arts teacher educators. Describes development of U.S. customary, metric, and SI metric systems; SI base units, some derived units, prefixes and symbols, and relates metric measurements to common objects and situations.
(TE)

159. GOING METRIC FOR STUDENTS. (Kit) Western Michigan University, Kalamazoo, MI. Center for Metric Education. 1974, ruler (300mm); converter; 5 tables; chart (27 x 41cm); Programed Unit (4p.); References (1p.); activity series (13p.)

These materials are available through the industrial education departments of teacher education institutions in each of the states.

Package of printed student materials and instructor's notes for industrial arts teacher educators. This basic kit contains a 300mm rule, centimetre/inch converter, reference sheet and color chart on basic metric units from National Bureau of Standards, conversion tables, a programed unit on metric measurement, metric references. Also self-study worksheets for estimation, measurement, and conversion.
(TE)

160. GOING METRIC IN DRAFTING. (Transparency Masters) Western Michigan University, Kalamazoo, MI. Center for Metric Education. 1974, 51 transparency masters; Notes and Comments (12p.)

These materials are available through the industrial education departments of teacher education institutions in each of the states.

Set of transparency masters and teacher's script for metrication of drafting in construction and manufacturing. Includes various scale comparisons, rounding-off rules and tolerancing, preferred metric linear sizes for engineering design, comparisons of first- and third-angle orthographic metric drawings, ISO metric thread sizes, and reading metric micrometers and calipers.
(TE)

161. GOING METRIC IN GRAPHIC ARTS. (Transparency Masters) Western Michigan University, Kalamazoo, MI. Center for Metric Education. 1974, 15 transparency masters; Notes and Comments (2p.)

These materials are available through the industrial education departments of teacher education institutions in each of the states.

Set of transparency masters and teachers' script for industrial arts teacher educators. Includes: ISO standards for paper sizes, comparisons of U.S. customary and metric paper sizes, printer's units, and screen rulings.
(TE)

162. GOING METRIC IN METALWORKING. (Transparency Masters) Western Michigan University, Kalamazoo, MI. Center for Metric Education. 1974, 37 transparency masters; Notes and Comments (8p.)

These materials are available through the industrial education departments of teacher education institutions in each of the states.

Set of transparency masters and teacher's script for industrial arts teacher educators. Includes reading metric ruler, micrometers, calipers, gauges and indicators, ISO and customary thread forms and sizes, metric wrench markings, dimensioning of drawings, sample drawings, changes for metric conversion of machine tools, and a heat treating chart in degrees Fahrenheit and degrees Celsius.
(TE)

163. GOING METRIC IN WOODWORKING AND BUILDING CONSTRUCTION. (Transparency Masters) Western Michigan University, Kalamazoo, MI. Center for Metric Education. 1974, 11 transparency masters; Notes and Comments (5p.)

These materials are available through the industrial education departments of teacher education institutions in each of the states.

Set of transparency masters and teacher's script for industrial arts teacher educators. Includes converting woodworking machines to metric by use of pressure sensitive metric tape, which tools need to be replaced and which will not, customary-metric sizes of hole borings for wood screws, British and probable U.S. standards for wood sizes, and sample metric drawings. Minimizes conversion problems.
(TE)

164. METRIC SYSTEM. (Transparencies) Creative Visuals, Big Spring, TX. 1974, 46 color transparencies with overlays; Teacher's Manual (18p.) $276.00 Order No. 389 AO-SR

This series has been divided into seven parts which are available individually; prices vary. Individual transparencies are sold for $7.00 each.

Order from: Creative Visuals, Division of Gamco Industries, Inc.
Box 1911, Big Spring, TX 79720

Quality transparency series for metric education. Effective use of color and overlays. Sets are: "Introduction to Metric," "Basic Metric Units," "Length," "Area," "Volume," "Weight," "Temperature." Systematic development of metric concepts. Cartoons and graphics employed. Appropriate for basic metric education, or review of basics for advanced levels. Teacher's manual with each set to suggest use and supplement metric information.
(S, PS, A, TE)

165. METRIC TRANSPARENCY MASTERS. Hobar Publications, St. Paul, MN. 1974, 150 b&w transparency masters $14.50

Order from: Hobar Publications
1305 Tiller Lane, St. Paul, MN 55112

Explains history, instructional ideas, and present use of metric system. The five components are: linear measure; linear to square; square to cubic to volume; volume to mass; light, electricity, temperature, amount; and time. Basic concepts for teaching metric system with exercises. Conversions provided.
(S, PS)

166. Wallach, Paul. THINK METRIC! (Transparencies) DCA Educational Products, Inc., Philadelphia, PA. 1974, 20 color transparencies with overlays; Instructor's Guide (13p.) $80.00 Order No. MET000

Each transparency is available separately (prices vary).

Order from: DCA Educational Products
424 Valley Road, Warrington, PA 18976

Three groups of multi-color transparencies and overlays. Group I, "Metric Units" includes English units, basic SI units and prefixes; Group II, "Conversion Factors," for inches, pounds, and kilometres; Group III, "Estimating Weights and Measures," shows common objects with alternate overlays in customary or metric units. Teacher's guide with objectives, script, and activities.
(S, A)

167. Wallach, Paul. THINK METRIC! GROUP I: METRIC UNITS (Transparencies) DCA Educational Products, Inc., Philadelphia, PA. 1974, 11 transparencies with overlays. $42.25 Order No. MET-1 - MET-11

Each transparency is available separately (prices vary).

Order from: DCA Educational Products
424 Valley Road, Warrington, PA 18976

Multi-color transparencies include: Think Metric, visual of common objects or sayings with metric measurement substitutions, The Customary System, The Seven Base Units of SI, Metric Units for Everyday Use, Metric Dollar, Metre, Kilogram, Capacity or Volume, Area, Temperature, Metric System Prefixes.
(S, A)

168. Wallach, Paul. THINK METRIC! GROUP II: CONVERSION FACTORS. (Transparencies) DCA Educational Products, Inc., Philadelphia, PA. 1974, 3 color transparencies $8.50 Order No. MET-12 - MET-14

Each transparency is available separately ($2.95 each)

Order from: DCA Educational Products
424 Valley Road, Warrington, PA 18976

Multi-color transparencies present factors, rules, and examples for two-way conversion of units, metric-customary or customary-metric. Topics are Inches and Centimetres, Pounds and Kilograms, Kilometres and Miles.
(S, A)

169. Wallach, Paul. THINK METRIC! GROUP III: ESTIMATING WEIGHTS AND MEASURES. (Transparencies) DCA Educational Products, Inc., Philadelphia, PA. 1974, 6 color transparencies with overlays $31.25 Order No. MET-15 - MET-20

Each transparency is available separately (prices vary).

Order from: DCA Educational Products
424 Valley Road, Warrington, PA 18976

Multi-color transparencies showing common objects or situations. Alternate overlays show customary and metric measurements and related conversion factors. Titles are Length, Height, Speed, Weight, Area, Temperature.
(S, A)

170. Cullen, Mary. THINK METRIC: UNDERSTANDING AND USING THE METRIC SYSTEM. (Slides) Denoyer-Geppert Audio-Visuals, Chicago, IL. 1974, Kodak carousel with 80 color slides; Teacher's Manual (25p.). $65.00 Catalog No. 68975

Order from: Denoyer-Geppert Audio-Visuals
Times Mirror, 5235 Ravenswood Avenue
Chicago, IL 60640
(312) 561-9200

Slide-study program provides students with feeling for metric measurements. Combines a deductive approach with drill. Has practice problems. Emphasizes basic unit of length, scientific notation, prefixes. Topics include: introduction; systems of measurement; measuring length, area, volume, mass, temperature; other standards. Teacher's manual provides explanation of each slide and answers to problems.
(S)

171. THE IMPLICATIONS OF METRIC CHANGE. (Audio Cassettes) Chicago Association of Commerce and Industry, IL. Date unknown, 2 cassettes. $20.00

Order from: Metric Cassettes
c/o Teach 'em, Inc.
625 N. Michigan
Chicago, IL 60611

Approximately 2 hours of recorded presentations from conference on implications of metrication for U.S. business and industry held March 1972. Useful for planners and policy-makers. Presentations by executives, labor leaders, government officials, and engineering research directors. Topics: "A Metric America," "What is SI," "The British Experience," "Effect on Large Companies," "Preparing to Convert," "Technical Considerations," "Labor Considerations," "The Government's Role," and "Making Conversion Profitable." Positive toward metric conversion.
(PS, TE)

172. LaGette, Barbara H., Fugate, Sarah P. LISTENING YOUR WAY TO UNDERSTANDING THE METRIC SYSTEM. (Audio Cassettes) Classroom World Productions, Raleigh, NC. 1973, 6 cassettes; teacher guide (6p.); 11 student worksheet reproduction masters. $42.50 Series No. 296

Order from: Classroom World Productions, Distribution Office
22 Glenwood Avenue, Raleigh, NC 27602
(919) 832-3901

Self-paced programed course with worksheets for each recorded lesson. Topics include: introduction to the metric system (prefixes), the metre as a unit of length, practical uses of the metre, the gram as a unit of mass (weight), the litre as a unit of volume (capacity), and thinking metrically. Field tested.
(S, A)

173. Edson, Ann; Schwartz, Allan A. [METRIC SYSTEM SKILLS NO. 1] INTRODUCING THE METRIC SYSTEM. WORKING WITH BASIC PREFIXES. (Record) Activity Records, Inc., Freeport, NY. 1973, 33 1/3 rpm $6.25 Order No. AR720

Also available in audio cassette: $7.25, Order No. AC 720.
The complete Metric System Skills series of 4 recordings can be purchased for: $24.95 with records; $28.95 with cassettes.

Order from: Educational Activities Inc.
P. O. Box 392, Freeport, NY 11520

Presents skills and drills on fundamental metric units; metric prefixes (deka-, hecto-, kilo-, deci-, centi-, milli-) and some of their numerical equivalents. Contains four single-concept, self-directing, self-correcting lessons with paper and pencil problems. For individuals, small groups, or entire class, as a beginning program in metrics or for reinforcement. Teacher's guide with questions and answers.
(S, A)

174. Edson, Ann; Schwartz, Allan A. [METRIC SYSTEM SKILLS NO. 2.] METRIC UNITS OF LENGTH. (Record) Activity Records, Inc., Freeport, NY. 1973, 33 1/3 rpm $6.25 Order No. AR721

Also available in audio cassette: $7.25, Order No. AC 721.

Order from: Educational Activities Inc.
P. O. Box 392, Freeport, NY 11520

One of a set of four recordings presenting skills and drills on fundamental metric units. Basic metric prefixes related to unit of length--the metre. Four single-concept, self-directing, self-correcting lessons on the recording. Twenty to twenty-five questions after each lesson, paper and pencil responses. Useful as beginning program or for reinforcement. Teacher guide with questions and answers.
(S, A)

175. Edson, Ann; Schwartz, Allan A. [METRIC SYSTEM SKILLS NO. 3.] METRIC UNITS OF WEIGHT. (Record) Activity Records, Inc., Freeport, NY. 1973, 33 1/3 rpm $6.25 Order No. AR722

Also available in audio cassette: $7.25, Order No. AC722.

Order from: Educational Activities Inc.
P. O. Box 392, Freeport, NY 11520

One of a set of four recordings providing paper and pencil drill in the use of prefixes related to kilogram. Series of 85 questions concerning terms dekagram, hectogram, kilogram, decigram, centigram, milligram, and some of their numerical equivalents. Four single-concept, self-directing, self-correcting lessons on the recording. For individual, small group, or class use as a beginning program or for reinforcement. Teacher guide with questions and answers.
(S, A)

176. Edson, Ann; Schwartz, Allan A. [METRIC SYSTEM SKILLS NO. 4.] METRIC UNITS OF CAPACITY. (Record) Activity Records, Inc., Freeport, NY. 1973, 33 1/3 rpm $6.25 Order No. AR723

Also available in audio cassette: $7.25, Order No. AC723

Order from: Educational Activities Inc.
P. O. Box 392, Freeport, NY 11520

One of set of four records or cassettes providing paper and pencil drill in use of prefixes related to the litre. 85 questions on dekalitre, hectolitre, kilolitre, decilitre, centilitre, millilitre, and some of their numerical equivalents. Four single-concept, self-directing, self-correcting lessons on the recording. For individual, small group, or class use for beginning program or for reinforcement. Teacher guide with questions and answers.
(S, A)

177. Taylor, Robert L. BASIC METRIC. LESSON A. (Multimedia Kit) Multi-Media Publishing, Inc., Denver, CO. 1974, 1 set slides or filmstrip (35mm, 44 frames, color); 1 audio cassette (approx. 1 hr.); Student Workbook (17p.); Instructor's Manual (32p.) $65.00 Order No. 05-001

Audio cassette and student workbooks available in English or Spanish. Additional student workbooks available: $2.85, Order No. 05-111-A.

Order from: Multi-Media Publishing, Inc.
1601 South Federal Blvd., Denver, CO 80219
(303) 935-5396

Multimedia kit compares metric units for length, mass [weight], and volume with customary units, giving common examples. Performance objectives; self-study; review; self-testing on metric symbols, prefixes, and abbreviations. Instructor's guide contains student tests and answers, lesson evaluation test, suggestions for group or individual use, practical measurement exercises for students, and script of narration.
(S, A)

178. Taylor, Robert L. BASIC METRIC. LESSON B. (Multimedia Kit) Multi-Media Publishing, Inc., Denver, CO. 1974, 1 set slides or filmstrip (35mm, 47 frames, color); 1 audio cassette (approx. 1 hr.); Student Workbook (21p.); Instructor's Manual (38p.) $65.00 Order No. 05-002

Audio cassette and student workbooks available in English or Spanish. Additional student workbooks available: $2.85, Order No. 05-111-B.

Order from: Multi-Media Publishing, Inc.
1601 South Federal Blvd., Denver, CO 80219
(303) 935-5396

Multimedia kit reviews basic metric units for length, mass [weight], volume, as well as symbols and prefixes which were presented in Lesson A of the series. Extensive study, review, and self-testing on converting from one metric unit ot another. Self-instructional with performance objectives. Instructor's guide contains lesson evaluation test and script of narration. Basic Metric, Lesson A is a prerequisite.
(S, A)

179. BASIC METRICS: AN INTRODUCTION TO THE SI METRIC SYSTEM. The Boeing Aerospace Co., Seattle, WA/Renton Vocational Technical Institute Learning Center, WA. Date unknown, 112p.

Price is not yet set and will be determined on a cost-recovery basis. A complete package of: student study guide, 160 35mm slides, and audio cassettes will also be available.

Order from: Research Coordinating Unit
State of Washington
Coordinating Council for Occupational Education
Olympia, WA 98504
(206) 753-5672

Individualized metric instructional booklet used after metric sound/slide orientation presentation. Has student objectives, practice problems, and summary questions. Content covers overview of SI metric system, basic elements of system, proper usage of selected derived units, and conversion factors.
(PS)

180. INDUSTRIAL CONVERSION TO THE METRIC SYSTEM. UNITS 1-6. (Multimedia Kit) Uniten Systems, Indianapolis, IN. 1974, 6 filmstrips (35mm, color); 6 audio cassettes; 5 Participant's Guides; Instructor's Guide (71p.); ruler (15cm); metric converter $280.00

The same program is available with 35mm color slides ($325.00) or Sony Videocassette ($850.00). Each of the 6 units and copies of instructor's and participant's guides may be purchased separately.

Order from: Uniten Systems
246 West 34th Street, Indianapolis, IN 46208
(317) 924-9214

Audio-visual program for business and industry. Program covers six topics: introduction to metric system, basic and derived units, linear measurement and precision instruments, geometric dimensioning and tolerancing, science and metrics (I, II). Stated program objectives. Teacher's Guide contains introduction, history, objectives, tests, bibliography. Each unit is approximately 20 minutes.
(S, PS, TE)

181. INDUSTRIAL CONVERSION TO THE METRIC SYSTEM. UNIT 1: INTRODUCTION TO THE METRIC SYSTEM. (Multimedia Kit) Uniten Systems, Indianapolis, IN. 1974, filmstrip (35mm, 60 frames, color); audio cassette; Participant's Guide (14p.)

$55.00 for filmstrip and cassette; $.25 for Participant's Guide. The same program is available with 35mm color slides ($65.00) or Sony Videocassette ($160.00).

Order from: Uniten Systems
246 West 34th Street, Indianapolis, IN 46208
(317) 924-9214

A 20-minute program with participant's guide for business and industry. Presents need for industrial conversion to metrics. Explains "divisible by 10" concept. Demonstrates industrial approach to hard and soft metrication. Introduces basic SI terminology and illustrates linear measurement. Six pages of instruction for secretaries on typing and printing metric.
(S, PS, TE)

182. INDUSTRIAL CONVERSION TO THE METRIC SYSTEM. UNIT 2: BASIC AND DERIVED UNITS. (Multimedia Kit) Uniten Systems, Indianapolis, IN. 1974, filmstrip (35mm, 53 frames, color); audio cassette; Participant's Guide (15p.)

$55.00 for filmstrip and cassette; $.25 for Participant's Guide. The same program is available with 35mm color slides ($65.00) or Sony Videocassette ($160.00).

Order from: Uniten Systems
246 West 34th Street, Indianapolis, IN 46208
(317) 924-9214

A 20-minute program with participant's guide for business and industry. Identifies basic units of length, mass, time, electrical current, temperature, illumination, and amount of substance. Demonstrates how to compute derived metric units and identifies their proper terms. Explains U.S. customary to metric conversions and how to use conversion charts.
(S, PS, TE)

183. INDUSTRIAL CONVERSION TO THE METRIC SYSTEM. UNIT 3: LINEAR MEASUREMENT AND PRECISION INSTRUMENTS. (Multimedia Kit) Uniten Systems, Indianapolis, IN. 1974, filmstrip (35mm, 52 frames, color); audio cassette; Participant's Guide (26p.)

$55.00 for filmstrip and cassette; $.25 for Participant's Guide. The same program is available with 35mm color slides ($65.00) or Sony Videocassette ($160.00).

Order from: Uniten Systems
246 West 34th Street, Indianapolis, IN 46208
(317) 924-9214

A 20-minute program with participant's guide designed for individuals using precision instruments. Explains metric counterpart of 6-inch scale, micrometer and vernier caliper, and illustrates how to read them. Participant's guide: charts, conversion tables, conversion exercises, test.
(S, PS, TE)

184. INDUSTRIAL CONVERSION TO THE METRIC SYSTEM. UNIT 4: GEOMETRIC DIMENSIONING AND TOLERANCING. (Multimedia Kit) Uniten Systems, Indianapolis, IN. 1974, filmstrip (35mm, 43 frames, color); audio cassette; Participant's Guide (12p.)

$55.00 for filmstrip and cassette; $.25 for Participant's Guide. The same program is available with 35mm color slides ($65.00) or Sony Videocassette ($160.00)

Order from: Uniten Systems
246 West 34th Street, Indianapolis, IN 46208
(317) 924-9214

A 20-minute presentation with participant's guide for draftsmen. Introduction to SI. Advantages of metric system and practical methods of implementation explained. Participant's guide contains drafting standards; tolerancing symbols, tap drill and clearance hole diameters, test.
(S, PS, TE)

185. INDUSTRIAL CONVERSION TO THE METRIC SYSTEM. UNIT 5: SCIENCE AND METRICS–PART I. (Multimedia Kit) Uniten Systems, Indianapolis, IN. 1974, filmstrip (35mm, 53 frames, color); audio cassette; Participant's Guide (17p.)

$55.00 for filmstrip and cassette; $.25 for Participant's Guide. The same program is available with 35mm color slides ($65.00) or Sony Videocassette ($160.00).

Order from: Uniten Systems
246 West 34th Street, Indianapolis, IN 46208
(317) 924-9214

A 20-minute presentation specifically for business and industry. Contains the metric formulas and terminology for mass, acceleration, weight, gravity, inertia, force and work. Presents technical terms used by industrial research technicians. Participant's guide contains unit test, supplementary test for units 1-6.
(S, PS, TE)

186. INDUSTRIAL CONVERSION TO THE METRIC SYSTEM. UNIT 6: SCIENCE AND METRICS–PART II. (Multimedia Kit) Uniten Systems, Indianapolis, IN. 1974, filmstrip (35mm, 59 frames, color); audio cassette; Participant's Guide (17p.)

$55.00 for filmstrip and cassette; $.25 for Participant's Guide. The same program is available with 35mm color slides ($65.00) or Sony Videocassette ($160.00).

Order from: Uniten Systems
246 West 34th Street, Indianapolis, IN 46208
(317) 924-9214

A 20-minute presentation for business and industry. Continues identification of metric terminology presented in Part I. Explanation and calculation of: density, pressure, work, torque, volume, kilograms per cubic metre (kg/m^3), grams per cubic centimetre (g/cm^3), joules, newtons and pascals. Emphasizes acquiring skill by working with SI units.
(S, PS, TE)

187. THE INTERNATIONAL SYSTEM OF UNITS (METRIC UNITS). (Multimedia Kit) Clearvue, Inc., Chicago, IL. 1973, 4 filmstrips (35mm, 66, 64, 62, 63 frames, color); 2 audio cassettes or 2 records; Teacher's Guide and Reading Script (32p.)

$54.00 with cassettes, Catalog No. CL550-SBTC. $50.00 with records, Catalog No. CL550-SBR. Parts of the kit may be purchased separately: $10.50 per filmstrip; $8.00 per cassette; $5.00 per record.

Order from: Singer Education Division
Society for Visual Education, Inc.
1345 Diversey Parkway, Chicago, IL 60616
(312) 525-1500

Four part series covering some technical aspects of SI. Includes seven basic SI units. Topics on length, time, temperature, mass, electric current, luminous intensity, amount of substance, plane angle and solid angle. Specific instructions on writing, using, and speaking SI metric. Practical comparisons of metric measures. Teacher's guide with discussion suggestions and reading script.
(S, PS, TE)

188. INTRODUCING THE METRIC SYSTEM. (Multimedia Kit) BFA Educational Media, Santa Monica, CA. 1972, 4 filmstrips (35mm, 30, 36, 36, 35 frames, color); 2 audio cassettes or 2 records; set of task cards

$52.00 with cassettes, Order No. 3T900; $48.00 with records, Order No. 3T800. Items in the kit may be purchased separately: $8.00 per filmstrip; $7.00 per cassette; $5.00 per record; $6.00 per set of task cards.

Order from: BFA Educational Media
2211 Michigan Avenue
Santa Monica, CA 90404

Filmstrips entitled: "The Meaning of Metric," "Measuring Length," "Unit of Volume and Mass," introduce commonly used metric units and show relationships of units of length to those of mass and volume. Final filmstrip covers advantages and disadvantages of metric system. Set of activity cards provides practice with metric measurement.
(A)

189. THE INTRODUCTION TO THE METRIC SYSTEM. (Multimedia Kit) Dawson Films, Fort Worth, TX. 1970, 4 filmstrips (35mm, 49, 52, 34, 35 frames); 4 audio cassettes; 4 Teacher's Guides $52.00

Individual items are available separately: $28.00 for 4 filmstrips; $14.00 for each filmstrip with cassette; $8.00 for each filmstrip.

Order from: Dawson Films
7025 Oakland Lane
Fort Worth, TX 76118
(817) 268-0313

Set of four filmstrips covering the history of measurement, length, volume, weight, how various measurements relate to each other, how SI metric compares with U.S. customary system, and how to convert from one system to the other.
(S)

190. THE INTRODUCTION TO THE METRIC SYSTEM. PART I: HISTORY OF MEASUREMENT. (Multimedia Kit) Dawson Films, Fort Worth, TX. 1970, 1 filmstrip (49 frames, 35mm, color); 1 audio cassette; Teacher's Guide (14p.). $14.00 $8.00 for filmstrip without cassette

Order from: Dawson Films
7025 Oakland Lane
Fort Worth, TX 76118
(817) 268-0313

Beginning with model of biblical ark, history of measurement is traced from early methods based on body proportions through first attempts to standardize measures. Prefixes of metre are defined (deci-, centi-, and milli-) and related to our decimal money system denominations. Teacher's Guide contains script and conversion formulas.
(S)

191. THE INTRODUCTION TO THE METRIC SYSTEM. PART 2: MEASUREMENT OF LENGTH. (Multimedia Kit) Dawson Films, Forth Worth, TX. 1970, 1 filmstrip (35mm, 52 frames, color); 1 audio cassette; Teacher's Guide (14p.). $14.00 $8.00 for filmstrip without cassette

Order from: Dawson Films
7025 Oakland Lane
Forth Worth, TX 76118
(817) 268-0313

Measurement of length is developed with use of colored metric cubes for metres, decimetres, centimetres, and millimetres. Metric-metric conversion formulas are given for them. The multiple prefixes deca-, hecto-, and kilo- are defined and applied to metres. Teacher's Guide contains script, activities, and conversion formulas.
(S)

192. THE INTRODUCTION TO THE METRIC SYSTEM. PART 3: MEASUREMENT OF VOLUME. (Multimedia Kit) Dawson Films, Fort Worth, TX. 1970, 1 filmstrip (35mm, 34 frames, color); 1 audio cassette; Teacher's Guide (11p.). $14.00 $8.00 for filmstrip without cassette

Order from: Dawson Films
7025 Oakland Lane
Forth Worth, TX 76118
(817) 268-0313

Liquid measure is related to length measurement. English and metric quantities are compared graphically and mathematically. Conversion formulas are given and prefixes are reviewed. Teacher's Guide contains script, activities, and conversion formulas.
(S)

193. THE INTRODUCTION TO THE METRIC SYSTEM. PART 4: MEASUREMENT OF WEIGHT. (Multimedia Kit) Dawson Films, Fort Worth, TX. 1970, 1 filmstrip (35mm, 35 frames, color); 1 audio cassette; Teacher's Guide (11p.). $14.00 $8.00 for filmstrip without cassette

Order from: Dawson Films
7025 Oakland Lane
Fort Worth, TX 76118
(817) 268-0313

Weight is related to length and volume and demonstrated with balance scales. Gives English and metric equivalents and demonstrates that conversion formulas in general use are not exact equivalents. Teacher's Guide contains scripts, activities, and conversion formulas.
(S)

194. Prior, Faith. THE KILOS ARE COMING. (Multimedia Kit) University of Vermont, Burlington. The Extension Service. 1969, 43 slides (35mm, color); or 43 b&w transparencies; Script (7p.); Resource List (14p.).

$13.00 with slides; $6.00 with transparencies; $17.00 with a combination of slides and transparencies. Make checks payable to: Mrs. Virginia Jodoin.

Order from: Mrs. Virginia Jodoin
Consumer Education, Program Assistant
Extension Service, 221 Terrill Hall
University of Vermont, Burlington, VT 05401

Metric awareness presentation illustrating history of measurement systems, orientation to metric system, description of basic metric elements, and discussion to support metric adoption.
(S, PS, A, TE)

195. MEASUREMENT AND SCIENTIFIC NOTATION. (Multimedia Kit) Wards Natural Science Establishment, Inc., Rochester, NY. 1974, 1 filmstrip (35mm, 89 frames, color); 1 audio cassette; 1 Manual (7p.); Pack of 25 Student Review Sheets (4p. each); Replacement Order Card. $29.00. Ward's Solo-Learn System, Catalog No. 78 W 0460

Individual replacements of parts of the Kit are available: 25 Review Sheets (No. 78W0462; $2.50); Manual (No. 78W0461; $1.50); Filmstrip (No. 670-0464, $10.50); Audio Cassette (No. 670-0466, $10.50).

Order from: Ward's Natural Science Establishment, Inc.
P. O. Box 1712, Rochester, NY 14603
(716) 467-8400

Fifty-minute, self-instructional, multimedia kit on exponential notation and metric system. Useful for review or remediation. Reviews conversions of decimal and exponential notation, arithmetic operations with exponential numbers, shows metric prefix names, and provides problems for practice. Student objectives, self-testing, with review-tests, and answers in manual.
(S, PS, A, TE)

196. Taylor, Robert L. METRIC: A SELF-INSTRUCTIONAL SERIES. LESSONS 1-8. (Multimedia Kit). Multi-Media Publishing, Inc., Denver, CO. 1974, 8 sets of slides or 8 filmstrips (35mm, color, frames per filmstrip: 57, 57, 51, 45, 47, 34, 47, 57); 8 audio cassettes; 8 Student Workbooks; 8 Instructor's Manuals $550.00 Order No. 05-101

Audio cassettes available in English or Spanish. Lessons 1-8 available individually: (1) $85.00, (2) $85.00, (3) $75.00, (4) $70.00, (5) $70.00, (6) $65.00, (7) $70.00, (8) $90.00. Additional student workbooks available for $2.85 each.

Order from: Multi-Media Publishing, Inc.
1601 South Federal Blvd., Denver, CO 80219
(303) 935-5396

A detailed, self-instructional series of eight lessons. Each lesson is approximately two hours and is divided into 10-minute modules with exercises. Audio-visual presentations are coordinated with student workbooks, which contain: instructions, rationales, objectives, learning exercises, and self-tests. Lesson topics are: (1) Length and Weight, (2) Area, Cubic Volume, Capacity Volume, (3) English-Metric Conversions, Length, (4) English-Metric Conversions, Weight, (5) English-Metric Conversions, Area, (6) English-Metric Conversions, Cubic Volume, (7) English-Metric Conversions, Capacity Volume, (8) Temperature—Calories—Density—Specific Gravity. Instructor's manuals for each lesson provide suggestions on use of series and lesson evaluations.
(S, PS, A, TE)

197. A METRIC AMERICA SERIES. (Multimedia Kit) Aims Instructional Media Services, Inc., Hollywood, CA. Date unknown, 6 filmstrips (35mm, color); 6 audio cassettes or 6 records; Study Guide (3p.)

$120.00 with cassettes, Code No. F1251; $90.00 with records, Code No. F1250.

Order from: Aims Instructional Media Services, Inc.
P. O. Box 1010, Hollywood, CA 90028
(213) 467-1171

Six sound filmstrips covering principles features of metric system and its advantages. Other topics include: metre, area, litre, kilogram, and degrees Celsius. Stresses decimal relationship between units. Prefixes used in conjunction with each base explained. Study guide included.
(S, PS, A, TE)

198. METRIC MATCH-UPS. TEACHER'S GUIDE FOR COOKING WITH METRICS. (Multimedia Kit) Corning Glass Works, NY. Date unknown. Teacher's Manual (6p.); 4 overhead transparencies; 6 spirit masters; 1 chart (61 x 91cm, color); 2 metric measuring cups $7.00

Order from: Corning Glass Works, Product Information Department
Houghton Park E-1, Corning, NY 14830

Teacher's kit for secondary homemaking classes explaining metric measurement in kitchen. Contents include: wall chart illustrating weight, temperature, volume, and length, teacher's manual with learning activities, overhead transparencies comparing SI and customary system, and spirit masters with recipe suggestions, metric exercises, basic units, and conversions.
(S, TE)

199. King, Franklin J.; King, Forrest A. METRIC MEASURING WITH MR. PAPER CLIP. (Multimedia Kit) LaMP Co., Columbia, MO. 1974, 182 color slides; 3 audio cassettes; 15 b&w transparencies; Script; Student Workbook; Teacher's Answers Book; Lesson Plans (25p.) $360.00

Student Workbooks ($1.30) and Teacher's Answers Books ($1.20) are available separately.

Order from: LaMP Company
Learning & Media Products
P. O. Box 83
Columbia, MO 65201

Multimedia teaching system with six units: the metric system, prefixes and metres, volume, weight [mass], temperature, and manipulating metric units. Focus on everyday uses. Cartoon character presents concepts. Lesson plans, behavioral objectives, supplemental activities, unit test items. Student workbook covers each lesson; teacher's edition with answers.
(S, PS, A, TE)

200. METRIC OR ENGLISH? THAT IS THE QUESTION. (Multimedia Kit) Clearvue Inc., Chicago, IL 60631. 1973, 4 filmstrips (35mm, average 64 frames each, color); 2 audio cassettes or 2 records; Teacher's Guide (32p.)

$40.00 with cassettes, Catalog No. VCL550-SATC. $36.50 with records, Catalog No. VCL550-SAR.

Order from: Singer Education Division
Society for Visual Education, Inc.
1345 Diversey Parkway, Chicago, IL 60614
(312) 525-1500

Multimedia kit includes history and development of customary and metric systems, difficulties in using customary system, defines basic SI metric units for length, area, volume, and mass, and prefixes and multiples. Teacher's guide includes purpose of each filmstrip, scripts, and suggested activities or questions.
(S, A, TE)

201. Flowers, John M.; Flowers, Rosabelle H. [METRIC SI NO. 1]. SURVEY OF MODERNIZED METRIC. (Multimedia Kit) Library Filmstrip Center, Wichita, KS. 1973, 1 filmstrip (35mm, 52 frames, color); 1 audio cassette or 1 record

$23.00 with audio cassette (specify audible or inaudible signals). $21.00 with record.

Order from: Library Filmstrip Center
3033 Aloma, Wichita, KS 67211
(316) 682-5925

Summary of seven basic SI units. Common measurement concepts associated with technical definitions. Decimal nature of SI is emphasized in simplified description of prefixes as multiples and sub-multiples of base SI units.
(S)

202. Flowers, John M.; Flowers, Rosabelle H. [METRIC SI NO. 2]. SI: LENGTH AND AREA. (Multimedia Kit) Library Filmstrip Center, Wichita, KS. 1974, 1 filmstrip (35mm, 50 frames, color); 1 audio cassette or 1 record

$23.00 with audio cassette (specify audible or inaudible signals). $21.00 with record.

Order from: Library Filmstrip Center
3033 Aloma, Wichita, KS 67211
(316) 682-5925

Detailed consideration is given to the base unit of length and the derived unit of area. Multiples and submultiples of each are explained. Familiar examples provided so the viewer can form associations with metric dimensions of objects.
(S)

203. Flowers, John M.; Flowers, Rosabelle H. [METRIC SI NO. 3.] SI: MASS AND VOLUME. (Multimedia Kit) Library Filmstrip Center, Wichita, KS. 1974, 1 filmstrip (35mm, 50 frames, color); 1 audio cassette or 1 record

$23.00 with audio cassette (specify audible or inaudible signals). $21.00 with record.

Order from: Library Filmstrip Center
3033 Aloma, Wichita, KS 67211
(316) 682-5925

Volume or capacity is treated as another derived unit of length and is discussed as an extension of the concept of area. Mass is expanded into an explanation of density as the ratio of mass and volume. Derived units of mass are then considered.
(S)

204. Flowers, John M.; Flowers, Rosabelle H. [METRIC SI NO. 4.] SI: TEMPERATURE. (Multimedia Kit) Library Filmstrip Center, Wichita, KS. 1974, 1 filmstrip (35mm, 49 frames, color); 1 audio cassette or 1 record

$23.00 with audio cassette (specify audible or inaudible signals). $21.00 with record.

Order from: Library Filmstrip Center
3033 Aloma, Wichita, KS 67211
(316) 682-5925

Kelvin scale and derived Celsius scale discussed. Origin of SI base temperature unit, the kelvin, explained; but common conditions of heat and cold are presented in Celsius because of everyday use.
(S)

205. Wallach, Paul. THE METRIC SYSTEM: INSTRUCTIONAL KIT. (Multimedia Kit) Metric Aids, Redwood City, CA. Date unknown, Instructional Materials (14p.); 1 booklet (11p.); 1 ruler (20cm); 1 measuring tape (150cm); 1 Celsius thermometer.

$7.50; The same kit plus 3 overhead transparencies (duplicates of pages in the Instructional Materials) is available for $12.00. 33% discount on orders for 5 or more kits.

Order from: Metric Aids
2852 Carolina Avenue, Redwood City, CA 94061

Metric kit of instructional materials and metric items for secondary students. Covers recommended instructional procedures, introduction to the metric system, general information, prefixes, metric ruler, quizzes, solutions to quizzes, metric units, conversion factors, and metric references.
(S)

206. THE METRIC SYSTEM. THE UNIVERSAL LANGUAGE OF MEASUREMENT. (Multimedia Kit) Pathescope Educational Films, Inc., New Rochelle, NY. 1971, 6 filmstrips (35mm, 55, 53, 53, 56, 50, 50 frames, color); 6 audio cassettes or 6 records; Teacher's Manual (104p.).

$85.00 with records; $95.00 with audio cassettes; Order No. 516C

Order from: Pathescope Educational Films, Inc.
71 Weyman Avenue, New Rochelle, NY 10802
(914) 235-0800

Set of six filmstrips introducing metric system and illustrating units of length, area, volume, mass, capacity, with a discussion of metric units in science laboratory. Emphasis is on learning metric units and conversions between metric units. Teacher's manual with activities, script and lesson evaluation.
(S, PS, A, TE)

207. METRIC WEIGHTS AND MEASURES. (Multimedia Kit) Library Filmstrip Center, Wichita, KS. Rev. 1973, 1 filmstrip (35mm, 52 frames, color); 1 audio cassette or 1 record.

$23.00 with audio cassette (specify audible or inaudible signals). $21.00 with record.

Order from: Library Filmstrip Center
3033 Aloma, Wichita, KS 67211
(316) 682-5925

Illustrates principles of length, volume, and weight in metric terms. Use of metric rule, vernier caliper and metric scales. Explanation of: kilometre, metre, centimetre, millimetre, kilolitre, litre, millilitre, kilogram, gram, and milligram. Establishment of standards for units of weight and measure explained.
(S)

208. THE METRICATION OF AMERICA. (Multimedia Kit) Westinghouse Learning Corp., New York, NY. 1973, 4 filmstrips (35mm, 71, 51, 56, 59 frames, color); 4 audio cassettes or 4 records; Teacher's Manual (46p.).

$59.50 with cassettes, Order No. 48-C110; $59.50 with records, Order No. 48-1110.

Order from: Westinghouse Learning Corporation
100 Park Avenue, New York, NY 10017

Part 1: origin of metric system, interrelationship of length, mass and capcity. Part 2: length. Part 3: explains units of mass. Part 4: explains capacity. Teacher's guide with script, learning objectives, suggested presentation modes, and follow-up activities.
(S)

209. Strain, Douglas C. METRICATION—"WILL THE UNITED STATES STAND ALONE?" (Multimedia Kit) Instrument Society of America, Pittsburgh, PA. Date unknown, 1 audio cassette (30 minutes); Script (10p.); 28 figures (21.5 x 28cm each) $10.00 Order No. 70-MI

Order from: Instrument Society of America
400 Stanwix Street, Pittsburgh, PA 15222
(412) 281-3171

Audio cassette with script and "Figures" adaptable for producing overhead transparencies for engineering. Includes metrication's impact on instrumentation and aerospace industries, graphically illustrated definitions, and calculations with SI units for power, mass, length, time, electric current, temperature, luminous intensity, force, pressure, and energy.
(PS, TE)

210. THINK METRIC. (Multimedia Kit) Educational Products Inc., Oak Lawn, IL. 1973, 2 filmstrips (35mm, 50, 44 frames, color); 2 audio cassettes; Teacher Guide and Script (10p.); 1 bumper sticker; 1 pamphlet; 1 booklet (28p.). $29.00 Order No. 4810

Order from: Educational Products Inc.
1211 West 22nd Street, Oak Brook, IL 60521
(312) 986-1620

A two-part program to acquaint students with metric measuring system, meanings of prefixes (centi-, milli-, deci-, deka-, hecto-, and kilo-), and relationships between metric units and measurement of length, area, and volume. Teacher's guide with script and suggested activities. Workbook with suggested problems, pamphlet on history and universality of metrics.
(S)

211. THINK METRIC. (Multimedia Kit) The Ohio State University, Columbus. Home Economics Extension. 1973, 31 slides (35mm, color); 1 audio cassette; Script (8p.). $9.00

Order from: The Ohio State University
Cooperative Extension Service
1787 Neil Avenue, Columbus, OH 43210

Fifteen-minute sound slide kit to create awareness of metric system and dispel anxieties of consumers and homemakers. Presents brief history of measurement and plan for U.S. conversion; relates metre, litre, gram to foot-pound system and to common consumer items; describes advantages of conversion. Includes script for leader.
(S, A)

212. Jodoin, Virginia. THINK METRIC. (Multimedia Kit) University of Vermont, Burlington. The Extension Service. 1974, 35 slides (35mm, color); Script (4p.); Resource List (14p.); Leader's Guide. $10.00
Make checks payable to: Mrs. Virginia Jodoin.

Order from: Mrs. Virginia Jodoin
Consumer Education, Program Assistant
Extension Service, 221 Terrill Hall
University of Vermont, Burlington, VT 05401

Slide presentation covers history of weights and measures and development of metric system. Topics include: cost of conversion, prefixes, and conversion within the metric system for centimetres, millimetres and metres. Set includes script, resource list, activities, recipes, leader's guide.
(S)

213. ALL YOU WILL NEED TO KNOW ABOUT METRIC (FOR YOUR EVERYDAY LIFE). (Chart) National Bureau of Standards, Washington, D.C. 40.5 x 53.5cm, color Free Letter Circular No. 1052

The same chart is also available as fact sheet, 20.5 x 26.5cm, free.

Order from: Metric Information Office
National Bureau of Standards, Washington, D.C. 20234
(202) 921-2658

Illustrates basic metric information needed for everyday life. Emphasizes metre, litre, gram, degrees Celsius, and the use of common prefixes: milli-, centi-, and kilo-.
(S, PS, A, TE)

214. BASE UNITS. (Chart) Gamco Industries, Inc., Big Spring, TX. 1974, 59 x 73cm color $3.95 Catalog No. C-BAS-3

A complete set of 3 Metric System Charts is available for $11.75, Catalog No. C-MGB-4.

Order from: Math-Master, Division of Gamco Industries, Inc.
Box 1911, Big Spring, TX 79720
(915) 267-6327

Wall chart in color describing basic units: length, mass, time, temperature, electric current, and luminous intensity. Prefixes for units.
(S, PS, A, TE)

215. BRIEF HISTORY OF MEASUREMENT SYSTEMS WITH A CHART OF THE MODERNIZED METRIC SYSTEM. National Bureau of Standards, Washington, D.C. Rev. 1972, 4p. $.30 NBS Special Publication 304A SD Catalog No. C13.10:304A

The Modernized Metric System (wall chart: 74 x 114cm, color) is also available for $.55; NBS Special Publication 304; SD Catalog No. C13.10:304.

Order from: Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402

Also from: ERIC (ED 090 027)

Chart, available in desk and wall sizes for general metric education. Presents seven basic metric (SI) units of measure with related graphics, formal definitions, tables of common conversions from customary measure to metric units and vice versa, and table of metric prefixes.
(S, PS, A, TE)

216. DUALPAK METRIC WALL CHARTS. (Charts) Polymetric Services, Inc., Tarzana, CA. 1972, 2 charts (59 x 84cm each, color)

$6.95 each for 1-4 sets; $6.50 each for 5-11 sets. Order No. C1 & C2.

Order from: Polymetric Services, Inc.
4600 Brewster Drive
Tarzana, CA 91356

Two wall charts in color: "U.S. Customary Measure and the Modern International Metric System" and "Seven Basic Metric Units of Measure." Chart No. 1 illustrates mass, liquid measure, volume, length, comparison of common measuring units, conversion factors, and prefixes. Chart No. 2 illustrates seven basic SI units, their symbols and details on how to use them.
(S, PS, A, TE)

217. GO METRIC. (Charts) AV Instruction System, Somers, CT. Date unknown, 10 charts (51 x 66cm, each, color) $12.00, pre-paid; $12.95 with invoice

Order from: AV Instruction Systems
P. O. Box 191
Somers, CT 06071

Each chart depicts a humorous event to which everyone can relate. Shows comparison between English and metric. Topics covered include: mass, square, metre, litre, kilometre, and temperature.
(S, A)

218. GRAM-KELVIN. (Chart) Gamco Industries, Inc., Big Spring, TX. 1974, 59 x 73cm, color $3.95
Catalog No. C-GRA-2

A complete set of 3 Metric System Charts is available for $11.75, Catalog No. C-MGB-4.

Order from: Math-Master
Division of Gamco Industries, Inc.
Box 1911
Big Spring, TX 79720
(915) 267-6327

Wall chart in color describing gram and its subdivisions, and Kelvin. Conversion formulas for Fahrenheit and Celsius. Compares ounces and pounds with grams and kilograms. Conversion formulas for ounces-grams, pounds-kilograms, and short tons-megagrams.
(S, PS, A, TE)

219. THE INTERNATIONAL METRIC SYSTEM. (Chart) Central Instrument Co., New York, NY. Date unknown, 71.5 x 107.5cm, b & w

Order from: Central Instrument Company
900 Riverside Drive
New York, NY 10032

Large chart describing the International System of Units (SI) graphically displays length, area, volume, mass, capacity, prefixes, and common equivalents and conversions.
(S, PS, A, TE)

220. LENGTH. (Chart) Volta Inc., Sillery, Quebec (Canada). 1974, 58.5 x 83.5cm, color $2.00

Order from: Volta Inc.
P. O. Box 425
Sillery, Quebec 6, Canada G1T 2R8
(418) 527-8285

Large wall chart of length measures in SI metric and customary systems with conversion factors linking the various measures. Units shown range from light year and nautical mile to micro-inch, nanometre, and angstrom.
(S, PS, TE)

221. MASS. (Chart) Volta Inc., Sillery, Quebec (Canada). 1974, 58.5 x 83.5cm, color $2.00

Order from: Volta Inc.
P. O. Box 425
Sillery, Quebec 6, Canada G1T 2R8
(418) 527-8285

Large wall chart of mass measures in SI metric and Canadian customary units, with conversion factors linking the various measures. Units shown include those ranging from long ton to carat, grain, and milligram. (S, PS, TE)

222. MEASURE WITH THE METRIC SYSTEM. (Chart) Scholastic Magazines, Inc., Englewood Cliffs, NJ. 1972, 73 x 106cm, color $2.50 (25% discount for schools) Order No. 6090

Order from: Scholastic Magazines, Inc., Reader's Choice
904 Sylvan Avenue, Englewood Cliffs, NJ 07632

Metric wall chart pictorially describes metre, litre, gram, area, and volume.
(S, PS, A, TE)

223. MEASURING IN METRIC. (Chart) Houghton Mifflin Co., Boston, MA. Date unknown, 47 x 61cm, color Order No. AC 160 N374

Order from: Houghton Mifflin Company
One Beacon Street
Boston, MA 02107

Color wall chart illustrating length, volume, area, temperature. Various items are depicted for each category. (S, A)

224. METER AND ITS DERIVED UNITS. (Chart) Gamco Industries, Inc., Big Spring, TX. 1974, 59 x 73cm, color $3.95 Catalog No. C-MET-1

A complete set of 3 Metric System Charts is available for $11.75, Catalog No. C-MGB-4.

Order from: Math-Master
Division of Gamco Industries, Inc.
Box 1911
Big Spring, TX 79720
(915) 267-6327

Wall chart describing metric and English rulers, area, and volume with tables for their conversions.
(S, PS, A, TE)

225. METRIC CONVERSION CARTOONS. (Posters) American National Metric Council, Washington, D.C. 1974, 4 posters (21.5 x 28cm each) $3.00 $2.00 for ANMC subscribers

Order from: American National Metric Council–Cartoons
1625 Massachusetts Avenue, N.W.
Washington, D.C. 20036

Series of 4 humorous "think metric" cartoons illustrating common metric units for length, temperature, volume, and mass.
(S, PS, A, TE)

226. METRIC CONVERSION FACTORS. APPROXIMATE CONVERSIONS TO METRIC MEASURES. (Chart) National Bureau of Standards, Washington, D.C. 1973, 20.5 x 27cm, b&w, printed both sides Free
NBS Letter Circular No. 1051

Order from: Metric Information Office
National Bureau of Standards
Washington, D.C. 20234
(202) 921-2658

The same information is available on a plastic card: Metric Conversion Card, 6.5 x 9cm; SD Catalog No. C13.10:365/2, $.20

Order from: Superintendent of Documents
U.S. Government Printing Office
Washington, D.C. 20402

Reference card presents metric conversion factors for approximate conversions to and from metric measures for length, area, mass [weight], volume, and temperature.
(S, PS, A, TE)

227. METRIC CONVERSIONS AT A GLANCE. U.S. CUSTOMARY TO METRIC–METRIC TO U.S. CUSTOMARY. (Charts) Abbey Books, Somers, NY. 1974, 2 charts (41.5 x 56.5cm each, color) $4.00 Order No. TP9133

Order from: Abbey Books
Metric Media Book Publishers
P. O. Box 266
Somers, NY 10589
(914) 248-5522

Two wall charts for conversions between U.S. customary and metric systems and vice versa. Shows measurement units, their symbols and conversion factors. Includes units for length, area, mass, volume, and temperature.
(S, PS, A, TE)

228. METRIC MEASURE AND METRIC SYSTEM. (Charts) Union Carbide Corp., Tuxedo, NY. Educational Aids Dept. 1973, 2 charts (63.5 x 107cm each, color) $3.50 Product Code MSW-1

Order from: The Educational Aids Department
Union Carbide Research Center
P. O. Box 363
Tuxedo, NY 10987

Chart 1 graphically illustrates relationship of linear measuring units: metre, decimetre, centimetre, and millimetre. Relates linear measure to volume measure. Chart 2 illustrates three basic units: metre, kilogram, litre, prefixes, and cooking measure equivalents.
(S, PS, A, TE)

229. METRIC PLACE VALUE CHART. (Chart) Ideal School Supply Co., Oak Lawn, IL. Date unknown, color $2.80 Order No. 7777

Order from: Ideal School Supply Co.
11000 South Lavergne Avenue
Oak Lawn, IL 60453

Chart with eye hooks. Used to demonstrate the meaning of metre, litre, and gram and relationship of decimal points. Directions included.
(S, PS, A, TE)

230. METRIC POSTERS. (Charts) Creative Publications, Palo Alto, CA. 1974, 4 charts (56 x 86cm each, color) $5.00 Order No. 61000

Order from: Creative Publications
P. O. Box 10328, Palo Alto, CA 94303
(415) 968-3977

Four colorful posters designed by Masami Miyamoto. It's a Metric World shows nations using metric system; Think Metric shows ease of conversion from one metric unit to another; World Records in metric; History of Metric System illustrates how metric system fits in the development of measurement in the western world.
(S, PS, A, TE)

231. THE METRIC SYSTEM. (Charts) Instructor Publications, Inc., Dansville, NY. 1974, 12 charts (32 x 41cm each, color); 1 chart (41 x 64cm, color) $3.95 Instructor Curriculum Materials No. 523

Order from: Instructor Publications, Inc.
P. O. Box 6108
Duluth, MN 55806

Metric teaching charts introduce students to basic structure of system. Charts 1-5 present fundamentals of metric system, basic units, prefixes, and common divisions. Charts 6-12 present relationships between inch-pound and metric system. Chart 13 shows area and volume. Suggested classroom activities included.
(S)

232. THE METRIC SYSTEM FOR EVERYDAY USE. (Chart) Abbey Books, Somers, NY. 1974, 41.5 x 56cm, color $2.25 Order No. P9132

Order from: Abbey Books
Metric Media Book Publishers
P. O. Box 266
Somers, NY 10589
(914) 248-5522

Wall chart of metric terms. Includes prefixes and units for length, area, volume, capacity, mass, speed, pressure, temperature, and fuel consumption.
(S)

233. METRIC TRAINING WALL POSTERS. (Charts) Swani Publishing Co., Roscoe, IL. 1972, 10 charts (44 x 56cm each, color) $3.50; Quantity discounts available.

Order from: Swani Publishing Company
Box 248
Roscoe, IL 61073

Separate charts for volume, length, clothing sizes, quart vs. litre, temperature, mass, mass and multiples, relationship between units, basic SI, and metre, litre, gram.
(S, PS, A, TE)

234. METRIC UNITS. (Chart) Compu-Data Services, Inc., Wayne, NJ. Date unknown, 75 x 110.5cm, color $2.00; $5.60 for 3 Order No. MWC-1

Order from: Real-T-Facs
Division of Realty Facts Company
26 Overlook Drive, P. O. Drawer 449
Warwick, NY 10990

Wall chart illustrating metre, gram, litre, area and volume. Bold black letters printed on heavy duty chart paper.
(S, PS, A, TE)

235. [METRIC WALL CHART.] Metric & Multistandard Components Corp., Elmsford, NY. 1974, 43 x 56cm, color, printed both sides $2.00

Order from: Wall Chart
Metric & Multistandard Components Corp.
198 Saw Mill River Road
Elmsford, NY 10523
(914) 592-4020

Presents millimetre and decimal inch equivalents from 1mm to 100mm. Includes conversion table, tapping drill sizes, wrench opening sizes, metric standard fits, tightening torques, and mechanical properties of fasteners conforming to ISO standards.
(S, PS, TE)

236. METRIC WALL CHART. (Chart) TAD Products Corp., Beverly, MA. Date unknown, 71 x 106cm $3.75 Order No. 25-9238

Order from: TAD Products Corp.
Box 25
Beverly, MA 01915

Chart compares English and metric measurements of length, area, volume, mass and capacity. It also includes summary of prefixes and a table of common equivalents and conversions.
(S, PS, A, TE)

237. METRICS FOR THE CLASSROOM. (Charts) Abbey Books, Somers, NY. 1974, 5 charts (28 x 43.5cm each, color) $5.95 Order No. C9131

Order from: Abbey Books
Metric Media Book Publishers
P. O. Box 266
Somers, NY 10589
(914) 248-5522

Set of color wall charts. Topics: relating decimal money notation to metric decimal notation, multiples of gram to common consumer items, multiples of metre to miles per hour and the foot, multiples of litre to common consumer products, and degrees Celsius to degrees Fahrenheit, body temperature and boiling temperature of water.
(S, PS, A, TE)

238. THE MODERNIZED METRIC SYSTEM. (Chart) Roy G. Scarfo Inc., Thorndale, PA. 1974, 57 x 71cm, color $3.00; $2.25 each for 10 or more.

Order from: Roy G. Scarfo Inc.
P. O. Box 217
Thorndale, PA 19372
(215) 269-2552

Wall chart defines and illustrates seven basic SI units: metre, kilogram, second, ampere, kelvin, mole and candela, and two supplementary units: radian and steradian. Full 40cm scale and one foot scale show relation between inches and centimetres. Metric conversion factors shown for industry, school, and home. Common automotive conversions and clothing sizes included.
(S, PS, A, TE)

239. PRESSURE AND STRESS. (Chart) Volta Inc., Sillery, Quebec (Canada). 1974, 58.5 x 83.5cm, color $2.00

Order from: Volta Inc.
P. O. Box 425
Sillery, Quebec 6, Canada G1T 2R8
(418) 527-8285

Large wall chart on pressure and stress in SI metric and customary systems with conversion factors for each. Units shown range from kilogram force per square millimetre and megapascal to pascal, microbar and dyne.
(S, PS, TE)

240. SI METRIC. REFERENCE CARD FOR THE INTERNATIONAL SYSTEM OF UNITS. (Chart) International Business Machines Corp., White Plains, NY. Date unknown, 21.5 x 47cm, b&w $.10 Order No. SR23-3726-2

Order from: IBM Educational Center
24445 Northwestern Hwy.
Southfield, MI 48075

Fold-out reference card with information on SI base units, supplementary units, derived units, and special units. Prefixes and symbols for metric multiples and sub-multiples, physical constants, common conversion factors for inch to millimetre, and degrees Fahrenheit to degrees Celsius.
(S, PS, TE)

241. Milton, Hans J.; Mettler, Albert J. SI UNITS. (Chart) Canadian Metric Association, Fonthill, Ontario (Canada). 1973, 21 x 29.5cm, color

$.25 for 1 copy; $1.25 for 10 copies; $6.00 for 100 copies.

Order from: Canadian Metric Association
P. O. Box 35
Fonthill, Ontario LOS 1EO
Canada

Well designed technical chart of SI base units for length, mass, time, electric current, thermodynamic temperature, luminous intensity and two supplementary units, radian and steradian. Shows their relationship to derived units with special names. Includes conversion factors and formulae.
(S, PS, TE)

242. THINK METRIC. (Charts) National Microfilm Association, Silver Spring, MD. 1972, 6 charts (43 x 56cm each, color) $5.75

Order from: National Microfilm Association
Publications Sales
8728 Colesville Road
Silver Spring, MD 20910

Series of six color posters with caption "Think Metric." Shows metric dimensions of size, weight, temperature, liquid volume, and simplicity of metric system.
(S, PS, A, TE)

243. VOLUME AND LIQUID CAPACITY. (Chart) Volta Inc., Sillery, Quebec (Canada). 1974, 58.5 x 83.5cm, color $2.00

Order from: Volta Inc.
P. O. Box 425
Sillery, Quebec 6, Canada G1T 2R8
(418) 527-8285

Large wall chart of volume and liquid capacity measures in SI metric and customary systems for U.S. and Canada with conversion factors. Includes units ranging from cubic metres and cubic yards, to pints, tablespoons, teaspoons, and millilitres.
(S, PS, TE)

244. WHAT ABOUT METRIC? METRIC IN EVERYDAY USE. (Chart) National Bureau of Standards, Washington, D.C. 1973, 26 x 60cm, color, printed both sides Free CIS-7 Insert

Order from: Metric Information Office
National Bureau of Standards
Washington, D.C. 20234
(202) 921-2658

Three page fold-out chart using "Think Metric" illustrations for mass, length, volume and temperature. Pictures relate to consumer and home-making activities. Metric unit prefixes are given.
(S, A)

Metric Converters and Devices

245. COOK N' SEW. ENGLISH-METRIC CONVERTER. (Conversion Slide) Union Carbide Corp., Tuxedo, NY. Educational Aids Dept. 1973, 8 x 19cm $2.50 Product Code CS-1

Special quantity discounts available. Class Pack of 25 student converters and one deluxe model available for $15.00

Order from: The Educational Aids Department
Union Carbide Research Center
P. O. Box 363, Tuxedo, NY 10987

Slide rule converter for solving English-metric conversions in decorating, sewing and cooking. Converts liquid measure (gallons, quarts, pints, cups, ounces, tablespoons, teaspoons), weight (pounds, ounces), linear measure (rods, yards, feet, inches), square measure (sq. yds., sq. ft., sq. in.), and temperature. Heavy, plastic coated, moisture resistant paper board. 10-page information booklet included.
(S, PS, A, TE)

246. DUCT CALCULATOR. (Conversion Slide) Nashua Corporation, Los Angeles, CA. Perrygraf Division. 1970, 8 x 21.5cm

Order from: The Torit Corporation
1133 Rankin Street
St. Paul, MN 55116

Metric slide rule calculator for computing appropriate duct work sizes for dust control equipment. Scales include velocity, velocity pressure, round and rectangular duct size computation, air volumes for various dust and particle sources, resistance at elbows and branches, and requirements for common types of metal and woodworking equipment.
(S, PS, TE)

247. E-Z METRICALCULATOR. (Conversion Slide) Rowsey Enterprises, Friendswood, TX. 1974. $1.50

Order from: Rowsey Enterprises
P. O. Box 666
Friendswood, TX 77546

Slide-rule type converter made out of cardboard for engineers and kitcheneers. Conversion for volume, gallons, quarts, Fahrenheit, Centigrade, mass, length, tons, yards, metres, inches, cups, tablespoons, teaspoons, ounces.
(S, PS, A, TE)

248. METRIC CONVERSION SLIDE. Blundell Harling Ltd., Weymouth (England). Date unknown, 14.5 x 28cm, plastic case $8.05 Order No. 008

Order from: Central Instrument Company
900 Riverside Drive
New York, NY 10032
(212) 923-6725

This slide was reproduced from the British Standards Institute Conversion Slide.

Plastic metric converter with metal edge and engraved slide, in polyvinyl cover. Conversions for: area, volume, mass, force, pressure, stress, work, energy, heat, power, capacity, length, and temperature. Gauges for British Standard wire and Brown & Sharpe.
(S, PS, A, TE)

249. [METRIC TEACHING AIDS: EVALUATION SAMPLE.] (Kit) Union Carbide Corp., Tuxedo, NY. Educational Aids Dept. Various dates, 2 charts (63.5 x 107cm each, color); 3 conversion slides (various sizes); meter tape; metric measuring cup (500ml) $9.00 plus tax

Money refunded if material is returned to Union Carbide within 30 days. All items in the kit are available separately.

Order from: Union Carbide Educational Aids Dept.
Box 363
Tuxedo, NY 10987

Product sampler includes slide converter for linear measure, area, volume, weight, liquid, and temperature and slide converter for cooking and sewing. One chart illustrates relationship of linear measuring units and linear measure to volume measure. Second chart illustrates metre, litre, gram, prefixes, and cooking measure equivalents. Measuring cup to use in conjunction with four cooking experiments.
(S, PS, TE)

250. METRICUBE. (Conversion Device) Polymetric Services, Inc., Tarzana, CA. Date unknown, 1 cubic decimetre paper

$5.95 each for 1-4 cubes; $5.50 each for 5-11 cubes. Item No. A1.

Order from: Polymetric Services, Inc.
18324 Oxnard Street, Tarzana, CA 93156
(213) 881-2227

One litre volume cube with six $100cm^2$ surfaces and edges 100mm in length. A millimetre rule is on slide. Moving parts show comparison of U.S. customary system and SI. Two built in working calculators convert weights and lengths rapidly; conversion tables; prefixes, seven basic SI units defined.
(S, PS, A, TE)

251. METRIVERTER. (Conversion Slide) Blundell Harling, Ltd., Weymouth (England). Date unknown, 8 x 19cm, plastic case $4.75 Order No. 1769

Order from: Central Instrument Company
900 Riverside Drive, New York, NY 10032
(212) 923-6725

Metric converter of formed screen printed construction with engraved slide, in plastic wallet. Conversions for length, mass, temperature, pressure, volume, viscosity, area, torque, BTU's, kilojoules, millibars, centistokes.
(S, PS, TE)

SECTION TWO:

REFERENCE MATERIALS

Reference Materials contain both basic background and in-depth metric information for specific interests. They can be used by teachers and students to supplement instructional materials or to develop activities for metric education. Items in this section are divided into eight content areas.

General Metrication materials include discussions of the historical development of measurement systems, the current (SI) metric system, and problems relating to changing to metric standards and procedures. Listed are major texts, general policy papers, and U.S. and foreign metric study reports.

Impact on Education contains items specifically for consideration by teachers and educational planners.

Metrication of Business and Industry includes metric information for specific industries, as well as general industrial guides.

Impact on Consumers contains materials discussing consumer concerns.

International System of Units (SI) covers descriptions of the current metric system and its measurement units, terms, symbols, and uses.

Converting Customary/Metric Measurement Units contains coversion tables and formulas for converting customary units, such as inches to SI metric units and vice versa.

National and International Standards includes materials related to those agencies which propose and obtain agreements for standards of measurement units, symbols, devices, usage, and products.

Bibliographies lists items which can be used to find additional metric resources.

GENERAL METRICATION

252. Ede, A. J. ADVANTAGES OF THE METRIC SYSTEM. Metrication Board, London (England). 1972, 92p. $2.20, paper

Order from: Pendragon House Inc.
220 University Avenue
Palo Alto, CA 94301

British Metrication Board publication on development of measurement, metric system, implications for metric conversion in daily living, education, and technology. Many illustrations unique to British terminology and experiences. Illustrations can be used directly, or adapted to suit U.S. terminology and experiences.
(S, PS, TE)

253. Barbrow, L. E., coordinator. DEPARTMENT OF DEFENSE. U.S. METRIC STUDY INTERIM REPORT. National Bureau of Standards, Washington, D.C. 1971, 118p. $1.25, paper SD Catalog No. C 13.10:345-9

U.S. Metric Substudy Reports, NBS, SP345-9.

Order from: Superintendent of Documents
U.S. Government Printing Office, Washington, D.C. 20402

Also from: ERIC (ED 070 830)

Report of results of Department of Defense study, conducted as part of U.S. Metric Study Act, to determine and evaluate advantages, disadvantages, and impact of metrication on military services. Also describes interaction with industrial sector in a national metrication effort.
(S, PS, TE)

254. Clark, Roy E.; Tascher, John M. FEDERAL GOVERNMENT: CIVILIAN AGENCIES. U.S. METRIC STUDY INTERIM REPORT. National Bureau of Standards, Washington, D.C. 1971, 317p. $2.25, paper SD Catalog No. C 13.10:345-2

U.S. Metric Substudy Reports, NBS SP345-2.

Order from: Superintendent of Documents
U.S. Government Printing Office, Washington, D.C. 20402

Also from: ERIC (ED 069 935)

U.S. Metric Study report of 55 federal agencies to determine extent of present metric usage within agencies; impact of increasing world-wide use on programs; expectations for planning and national conversion strategies; effects on national activities and agencies' ability to perform their missions.
(S, PS, TE)

255. FOUR PAPERS ON METRIC CONVERSION. National Bureau of Standards, Washington, D.C. Metric Information Office. Date unknown, 21p. Free, paper

Order from: Metric Information Office
National Bureau of Standards
Washington, D.C. 20234
(202) 921-2658

A pamphlet covering impact on business, education, and the consumer, with a history of measurement and metric. Papers are: "U.S. Metrication - Why?," Roy E. Clark; "Metrication in Business and Industry," L. E. Barbrow; "Metric Change and the Role of Education," and "The Effect of Metrication on the Consumer," Jeffrey V. Odom.
(S, PS, TE)

256. Treat, Charles F. A HISTORY OF THE METRIC SYSTEM CONTROVERSY IN THE UNITED STATES. U.S. METRIC STUDY INTERIM REPORT. National Bureau of Standards, Washington, D.C. 1971, 298p. $2.25, paper SD Catalog No. C 13.10:345-10

U.S. Metric Substudy Reports, NBS SP345-10.

Order from: Superintendent of Documents
U.S. Government Printing Office, Washington, D.C. 20402

Also from: ERIC (ED 069 885)

U.S. legislative activities and campaigns for and against adoption of the metric system are covered for years 1790 through 1968. Significant investigations on the question are highlighted. An extensive bibliography is included.
(S, PS, TE)

257. Hopkins, Robert A. THE INTERNATIONAL (SI) METRIC SYSTEM AND HOW IT WORKS. Polymetric Services, Inc., Reseda, CA. Rev. 1974, 285p. $12.95

Order from: Polymetric Services, Inc.
P. O. Drawer L, Tarzana, CA 91356

Reference for education, government, and industry policy-makers and planners. Covers: historical development, metric system and conversion tables, costs/benefits of conversion, changing an industry to metric production in 25 steps. Illustrations and conversion charts for machine tools, engineering drawings and mapping, building materials, electrical engineering standards, ISO metric paper sizes, and the household. Describes present status of metric and implications for education.
(S, PS, TE)

258. LEGISLATION AND REGULATORY CONTROLS—FEDERAL AND ALL STATES. J. J. Keller & Associates, Inc., Neenah, WI. 1974, unnumbered. $59.00, Executive Binder Edition (looseleaf)

Volume II of the Metric System Guide Series of 5 volumes. A quarterly update service is also available: $40.00 per annual subscription.

Order from: J. J. Keller and Associates, Inc.
145 West Wisconsin Avenue, Neenah, WI 54956
(414) 722-2842

This volume presents U.S. federal and state regulations and legislation dealing with metrication. Features major standards organizations, background charts and graphs, detailed information on educational activities by states and their current stand on metric, weights and measures systems, and glossary.
(PS, TE)

259. Burton, William K., ed. MEASURING SYSTEMS AND STANDARDS ORGANIZATIONS. American National Standards Institute, Inc., New York, NY. Date unknown, 45p. $1.25, paper Order No. SR10

Discounts available: $.90 each for 50-499 copies; $.70 each for 500-999 copies; $.60 each for 1000 or more copies. Part of ANSI's seven volume metric package, available for $5.50.

Order from: American National Standards Institute, Inc.
1430 Broadway, New York, NY 10018

Illustrated booklet describing development of measuring systems, past and present, role played by national and international organizations in the standardization of measurement systems, development of metric system, metric terminology, and six basic units as of 1969.
(S, PS, TE)

260. Hirsch, S. Carl. METER MEANS MEASURE. THE STORY OF THE METRIC SYSTEM. The Viking Press, New York, NY. 1973, 126p. $4.95

Order from: The Viking Press
625 Madison Avenue, New York, NY 10022

Narrative describes: development of metric system during French Revolution, state of measurement in U.S. and western world over time; scientists, statesmen and inventors who struggled with the problems of metric development; reasons for U.S. conversion; and probable effects on daily life. Tables and definitions of metric units (SI) are appended.
(S, PS, A, TE)

261. A METRIC AMERICA. National Bureau of Standards, Washington, D.C. 1971, 9p. Free, paper

Reprinted from the National Bureau of Standards Technical News Bulletin, pp. 222-230, September 1971.

Order from: Metric Information Office
National Bureau of Standards, Washington, D.C. 20234
(202) 921-2658

An article on the 1968 U.S. Metric Study, and on Secretary of Commerce Stans' recommendations. Describes groups participating in the study, summarizes positions of the groups regarding U.S. metric conversion, and briefly presents a case study of metric conversion in the antifriction bearing industry. List of related government documents provided.
(S, PS, A, TE)

262. De Simone, Daniel V. A METRIC AMERICA: A DECISION WHOSE TIME HAS COME. National Bureau of Standards, Washington, D.C. 1971, 170p. $2.50, paper SD Catalog No. C13.10:345

NBS Special Publication 345.

Order from: Superintendent of Documents
U.S. Government Printing Office, Washington, D.C. 20402

Also from: ERIC (ED 055 884)

Findings of the U.S. Metric Study. Covers following topics: (1) perspective, (2) two centuries of debate, (3) measurement systems, (4) arguments for and against metric, (5) what it means to go metric, (6) the metric question in the context of the future world, (7) the broad consensus, (8) recommendation and problems needing early attention, (9) benefits and costs, and (10) Britain's and Japan's approach. Bibliography, ISO recommendation R 1000, and research methodology in appendices.
(S, PS, A, TE)

263. METRIC CONVERSION BILLS. American Enterprise Institute for Public Policy Research, Washington, D.C. 1974, 24p. $2.00, paper

Legislative Analysis No. 14, 93rd Congress.

Order from: American Enterprise Institute for Public Policy Research
1150 - 17th Street, N.W., Washington, D.C. 20036

Balanced analysis of current legislative proposals and policies on metric conversion. Topics include: background, summary of H.R. 11035, discussion of the arguments, and notes to text.
(S, PS, A, TE)

264. METRIC CONVERSION. UNANSWERED QUESTIONS AND A PRACTICAL SOLUTION: METRIC MONITORING AND ASSISTANCE BOARD. International Brotherhood of Electrical Workers, Washington, D.C. Date unknown, 15p. Free, paper

Order from: International Brotherhood of Electrical Workers
1200 Fifteenth Street, N.W., Washington, D.C. 20005

Trade union pamphlet criticizing attempts to encourage U.S. metric conversion at this time. Useful to planners and policy-makers. Describes potential negative impact on workers, the economy, consumers, and small businesses. Advocates an independent national board to collect and interpret data, proposes policy to assist and compensate workers and small businesses. Criticizes and interprets differently official conclusions of U.S. Metric Study report, "A Metric America."
(S, PS, A, TE)

265. METRIC MANUAL. J. J. Keller & Associates, Inc., Neenah, WI. 1974, 362p. $35.00, looseleaf binder

Order from: J. J. Keller and Associates, Inc.
145 West Wisconsin Avenue, Neenah, WI 54956
(414) 722-2848

Practical background information regarding history of measurement, development of metrication, and advancements within U.S., standards and measurement comparisons, advantages and disadvantages of metrics. Glossary, appendix, illustrations, charts, references.
(S, PS, A, TE)

266. Deming, Richard. METRIC POWER: WHY AND HOW ARE WE GOING METRIC. Thomas Nelson Inc., Nashville, TN. 1974, 144p. $5.95

Order from: Thomas Nelson Inc.
30 East 42nd Street, New York, NY 10017
(212) 697-5573

Discusses history of weights and measures, advantages of metric system, and how metrication will effect businesses and individuals. Contains conversion tables, SI basic units, and suggestions for further reading.
(S, PS, A, TE)

267. Eastman, Robert M. METRICATION. University of Missouri, Columbia. Extension Division. 1974, 4p.

Single copies free, paper. $.10 each for additional copies.
Engineering Science and Technology Guide, EG 4000.

Order from: Publications, 205 Whitten Hall
University of Missouri, Columbia, MO 65201

An engineering science and technology guide on metrication. Topics covered include: history of the metric system, international metric system, present status, advantages, problems, and metric in U.S.
(PS, TE)

268. METRICATION HANDBOOK. THE MODERNIZED METRIC SYSTEM EXPLAINED. J. J. Keller & Associates, Inc., Neenah, WI. 1974, 142p.

$10.00, paper, spiral-bound; $7.50 each for 2-5 copies. Discounts available for 5 or more copies.

Order from: J. J. Keller & Associates, Inc.
145 West Wisconsin Avenue, Neenah, WI 54956

One of the most complete explanations of base units of measure, where and how to use them, rules for correct usage. Sections on: history and development, standards and systems, conversion considerations, applications, U.S. Metric Study, living metric, references, sources, contacts, and metrication in industry, education, and on the home front. Marginal notes.
(S, PS, A, TE)

269. METRICATION IN THE STATES. The Council of State Governments, Lexington, KY. 1970, 10p.
$1.75, paper Order No. RM-452

Order from: The Council of State Governments
Iron Works Pike, Lexington, KY 40505

Also from: ERIC (ED 070 819)

One of three studies on impact of metrication on state and local government, conducted as a part of the U.S. Metric Study. Discusses present status and the future implications of metrication alternatives for the states, using California and Kentucky as examples. The need for coordinated federal metric planning is emphasized.
(S, PS, TE)

270. METRICATION IN THE UNITED STATES–ORIENTATION AND STRUCTURE. J. J. Keller & Associates, Inc., Neenah, WI. 1974, unnumbered $59.00, Executive Binder Edition (looseleaf)

Volume I of the Metric System Guide Series of 5 volumes. A quarterly update service is also available: $40.00 per annual subscription.

Order from: J. J. Keller & Associates, Inc.
145 West Wisconsin Avenue, Neenah, WI 54956
(414) 722-2848

Presents background information. Included are: chronology of metric measurement, history and development, discussion of metrication in the U.S. for ten major components of economy, present and future U.S. involvement in international standards, relationship of customary and SI units, and glossary.
(S, PS, A, TE)

271. METRICATION–LEGAL & TRADE IMPLICATIONS. METRIC CONVERSION PAPER 1. American National Metric Council, Washington, D.C. 1974, 31p.

$2.00, paper; $7.00 for 4 copies of the same title or other of the five titles in the Metric Conversion Paper Series.
ANMC subscribers: $1.50, paper; $5.00 for 4 copies.

Order from: American National Metric Council
1625 Massachusetts Avenue, N.W., Washington, D.C. 20036
(202) 232-4545

Three articles on legal and trade implications of metrication: "Metric Legislation in the United States," by Senator Claiborne Pell; "Legal Aspects of Metrication," by William E. Zeiter; and "International Commerce in a Metric World," by Donald L. Peyton.
(S, PS, TE)

272. Donovan, Frank. PREPARE NOW FOR A METRIC FUTURE. Weybright and Talley, Inc., New York, NY. 1970, 212p. $5.95

Order from: Weybright and Talley, Inc.
750 Third Avenue, New York, NY 10017
(212) 490-1155

Also available in paper: $1.25 Book No. 08227-125

Order from: Popular Library Publishers
650 Third Avenue, New York, NY 10016
(212) 661-4200

A reference book advocating conversion to the metric system. Details historical development of the English system, comparison of customary and metric systems, and controversies related to U.S. conversion. Describes conversion in other countries, and the status of conversion in the U.S.
(S, PS, A, TE)

273. Odom, Jeffrey V., ed. TESTIMONY OF NATIONALLY REPRESENTATIVE GROUPS. U.S. METRIC STUDY INTERIM REPORT. National Bureau of Standards, Washington, D.C. 1971, 165p. $1.50, paper SD Catalog No. C13.10:345-12

U.S. Metric Substudy Reports, NBS SP345-12.

Order from: Superintendent of Documents
U.S. Government Printing Office, Washington, D.C. 20402

Also from: ERIC (ED 067 500)

A summary of responses received from more than 700 associations, societies, unions and other groups invited to submit their opinions and viewpoints on the issues raised by the U.S. Metric Study.
(S, PS, A, TE)

274. Holt, Susan Fraker. "The United States and the Metric System." Exponent, v2 n2, 32p., Dec. 1974, Rev. June 1973. Free in limited quantities, paper.

Order from: Office of Public Information
Federal Reserve Bank of Minneapolis
Minneapolis, MN 55480

Booklet advocating conversion to the metric system. Discusses the U.S. Metric Study questions and recommendations, presents background on development of metric system, current arguments on U.S. conversion, development and effect of international standards on trade, opinions of educators and industrialists, experiences of other nations making recent conversions, and discussion on costs of conversion.
(S, PS, A, TE)

275. "What We Should Know If We Change to the Metric System." Advisory Council Guide, v31 n9, 4p., Sept. 1974. Free

Order from: Education Dept., Ohio Farm Bureau Federation, Inc.
245 North High Street, Columbus, OH 43216

Information sheet describing background and issues concerning metric conversion in the United States. Includes some "think metric" illustrations, chart of basic conversions, and discussion questions for Farm Bureau Federation members to study.
(S, PS, A, TE)

IMPACT ON EDUCATION

276. The Arithmetic Teacher, v20, n4, pp. 245-306, April 1973 and v20, n5, pp. 390-402, May 1973. $1.25 for each single issue

Order from: National Council of Teachers of Mathematics
1906 Association Drive, Reston, VA 22091

Two journal issues with metric articles covering: historical background, recent U.S. developments, conversion experiences in Britain and Hawaii, measurement and metric measurement concepts, and advantages of metric system. Includes: activity sheets adaptable to ABE, annotated bibliography of print and non-print materials, and sources of materials and equipment. Practical.
(S, PS, A, TE)

277. Robinson, Berol D. EDUCATION. U.S. METRIC STUDY INTERIM REPORT. National Bureau of Standards, Washington, D.C. 1971, 201p. $1.75, paper SD Catalog No. C 13.10:345-6

U.S. Metric Substudy Reports, NBS SP345-6.

Order from: Superintendent of Documents
U.S. Government Printing Office, Washington, D.C. 20402

Also from: ERIC (ED 072 218)

Report dealing with effects on U.S. education of adopting metric system. Topics include: (1) educational advantages and disadvantages of the metric system, (2) current usage of metric measurements in schools, and trends in usage, (3) how education would accommodate a planned or unplanned change to metric and an estimate of costs, and (4) recommendations which take best advantage of the changes. Texts of key papers presented at the Education Conference in 1970 are appended.
(S, PS, A, TE)

278. Chalupsky, Albert B.; and others. GOING METRIC: AN ANALYSIS OF EXPERIENCES IN FIVE NATIONS AND THEIR IMPLICATIONS FOR U.S. EDUCATIONAL PLANNING. FINAL REPORT. American Institutes for Research in the Behavioral Sciences, Palo Alto, CA. 1974, 128p.

$5.40, paper, for prepaid orders; $6.40 with billing. Order No. AIR-41800-2/74-FR. National Institute of Education Project No. 3-2173.

Order from: Metric Studies Center, American Institutes for Research
P. O. Box 1113, Palo Alto, CA 94302

Study reviews early history of metric conversion, recent U.S. experiences, metrication experiences in U.K., Australia, South Africa, New Zealand, and Canada; societal and instructional practices, problems and solutions in those countries; and implications for U.S. education. Practical guidelines and suggestions for educators.
(S, PS, A, TE)

279. MEASURE FOR MEASURE: A GUIDE TO METRICATION FOR WORKSHOP CRAFTS AND TECHNICAL STUDIES. Schools Council, London (England). 1970, 61p. $1.75, paper. Order No. 9497

Order from: Citation Press
50 West 44th Street, New York, NY 10036

British teachers' guide for converting shops. Presents ideas for stages of implementing metrication in metalwork, woodwork, and technical drawing laboratories. Appendices include metric background information on metric machine speeds and feeds, drills and screw threads, rules and dial calibrations, timber and paper sizes, and suggested references.
(PS, TE)

280. Dieffenderfer, Richard Alan. METRIC CONTINGENCY STUDY: A NATIONAL SURVEY CONCERNING PROBLEMS IN STATE LEVEL VOCATIONAL EDUCATION PLANNING FOR METRICATION. The Ohio State University, Columbus. Dept. of Vocational and Technical Education. Unpublished dissertation, 1974, 380p.

$5.00, plus shipping and tax, for microfilm copy; $11.00, plus shipping and tax, for paper copy. Order No. 74-17768.

Order from: Xerox University Microfilms, Dissertation Copies
P. O. Box 1764, Ann Arbor, MI 48160

Study focusing on need for contingency planning to cope with problems in vocational education as a result of metric conversion in the United States. Five national professional groups of state vocational leaders identified the extent of metric program planning and implementation in their states, projected metrication activities, and determined major problems in metric program development and implementation.
(S, PS, TE)

281. "Metric Conversion and the Teacher." National Education Association Briefing Memo, n7, 4p., September 1974. Free, paper (single copies only)

Order from: Information Center, Instruction and Professional Development
National Education Association
1201 16th Street, N.W., Washington, D.C. 20036

Brief but accurate introduction to metrics for teachers. Topics include NEA responses to metric conversion, some advantages of the metric system, and where teachers can obtain information on metric conversion.
(S, PS, A, TE)

282. Pokorney, Joseph L. METRIC CONVERSION: THE TRAINING COLOSSUS OF THE SEVENTIES. American Society for Training and Development, Madison, WI. 1973, 6p. Free, paper

Reprinted from: Training and Development Journal, June 1973.

Order from: Marketing Services Department
American Society for Training and Development
P. O. Box 5307, Madison, WI 53705
(608) 274-3440

Article for industry presents metric training model developed for NASA by author. Structure is a three-dimensional matrix with groups of personnel to be trained and metric topics to be covered along two primary coordinates. Third coordinate provides for training time dimension.
(S, PS, TE)

283. Higgins, Jon L., ed. A METRIC HANDBOOK FOR TEACHERS. ERIC Information Analysis Center for Science, Mathematics, and Environmental Education, Columbus, OH/National Council of Teachers of Mathematics, Reston, VA. [1974], 144p. $2.40, paper, spiral-bound

A 10% discount on orders of 2-9 copies. A 20% discount on orders of 10 or more copies.

Order from: National Council of Teachers of Mathematics
1906 Association Drive, Reston, VA 22091

Reference handbook providing practical suggestions for teaching metric system at all levels. Topics include: introducing and teaching the metric system, activities with guidelines, looking at measurement process, metrication, measure, and mathematics. Reprints of journal articles organized within topics listed.
(S, PS, A, TE)

284. "Metric System." Man/Society/Technology: Journal of Industrial Arts Education, v34 n1, 36p., September/October 1974.

Single copies of the journal available for $1.50.

Order from: American Industrial Arts Association
1201 Sixteenth Street, N.W., Washington, D.C. 20036

Journal issue on metric education implications and practices for industrial arts teachers. Includes "The Current Status and Impact of Metric Conversion," two articles relating to teacher education, suggestions for industrial arts teachers, description of a metrication workshop for teachers, proposed standards for typography and paper stocks in graphics, and a centerfold double-overlay transparency master on reading a metric micrometer.
(S, PS, A, TE)

285. "Metric System." Wisconsin Journal of Public Instruction, v2 n4, pp. 137-180, Summer 1974.

Annual journal subscription available for $2.00.

Order from: Wisconsin Department of Public Instruction
126 Langdon Street, Madison, WI 53702

Journal issue on educational implications of conversion to metric system. Contains historical development and progress of metric system, introduction to units of metric system, Wisconsin Department of Public Instruction position paper on conversion, implications for teachers, and discussion of mass as "confusion between force in newtons and fictitious idea of force in kilograms."
(S, PS, A, TE)

286. Izzi, John. METRICATION, AMERICAN STYLE. Phi Delta Kappa Educational Foundation, Bloomington, IN. 1974. 50p.

$.50, paper; $.35 for members of Phi Delta Kappa. Fastback No. 41.

Order from: Phi Delta Kappa
Eighth and Union, Box 789
Bloomington, IN 47401

Reference booklet providing an overview of basic metric information and concepts for teachers. Topics include: history of metrics in U.S., man and measurement, learning metric concepts, recommended sources of information and materials, and "Metrication, American Style." SI metric definitions, prefixes and conversions appended
(S, A, TE)

287. "Metrics in Industrial-Technical Education." School Shop, v33 n8, 184p., April 1974.

Single copies of the April issue available for $2.25.

Order from: School Shop
Box 623, Longshore Drive, Ann Arbor, MI 48107
(313) 769-1211

Journal issue on metric with twenty-five articles on legislation, SI units, conversion to metric units, companies "changing to metrics," teacher training, metrics and tools, and where to ask for help.
(S, PS, A, TE)

288. NEW YORK EDUCATORS AND THE METRIC SYSTEM: A SURVEY OF SELECTED SECONDARY AND POST-SECONDARY TEACHERS' USAGE, NEEDS, AND FEELINGS REGARDING METRIC MEASUREMENT. New York State Education Dept., Albany, NY. Bureau of Occupational Education Research. 1974. 16p. Free, paper

Order from: Bureau of Occupational Education Research
New York State Research Coordinating Unit
New York State Education Department
Room 468 EBA, Albany, NY 12224
(518) 474-6386

This study describes survey procedure and findings. Majority of secondary and post-secondary teachers who responded either had students use metrics in classes or labs, or created an awareness of metric concepts through visual aids. Three-quarters of secondary teachers and one-half post-secondary desire metric workshops. Recommends State Department leadership in metric education activities. Metric resource list appended.
(S, PS, A, TE)

289. "The Open Forum." Business Education Forum, v28, n3, pp. 5-19, December 1973. $2.50, single issue

Order from: National Business Education Association
1906 Association Drive
Reston, VA 22091

Five articles discuss: current status of metric conversion, metrication in business and industry, effect of metrication on consumers, metrication activities in education, and how business teachers should plan for metrication.
(S, PS, TE)

290. THINK METRIC. (Pamphlet) National Education Association Publishing, Washington, D.C. Date unknown, 6p.

$2.25 for each set of 30 pamphlets. Stock No. 051-02242

Order from: NEA Publications Order Department, The Academic Building
Saw Mill Road, West Haven, CT 06516
(203) 934-2669

Brochure on metric implications for home and school. Advocates "thinking metric," describes advantages of metric conversion, presents basic metric units for length, volume, weight [mass], and temperature, relates them to familiar objects. Briefly describes what parents and teachers should do. Discusses "weight" instead of standard SI term "mass."
(S, A, TE)

METRICATION OF BUSINESS AND INDUSTRY

291. THE ABC'S OF SI. National Fluid Power Association, Inc., Thiensville, WI. Rev. 1974, 13p. $2.00, paper Series T1.4.2, Supplement No. 1

Order from: National Fluid Power Association
P. O. Box 49, Thiensville, WI 53092

Booklet to acquaint members of the Fluid Power Industry with preferred metric terms. Has special significance for engineering or control occupations related to agri-business, natural resources, construction, environmental control, manufacturing, and marine science.
(S, PS, TE)

292. ANTITRUST IMPLICATIONS OF METRIC CONVERSION. American National Standards Institute, New York, NY. 1971, 9p. $2.00, paper

$1.60 each for 10-49 copies; $1.40 each for 50-99 copies. Discounts on orders of 100 or more copies. Part of ANSI's seven volume metric package, available for $5.50.

Order from: American National Standards Institute
1430 Broadway, New York, NY 10018

Study of antitrust implications of coordinated metric conversion from viewpoint of industry. Recommends developing a government-industry partnership agency to authorize and review industry conversion to safeguard against violations of antitrust laws, establishment of a timetable for developing and implementing some 20,000 engineering standards which have national significance, and gradual conversion to coincide with obsolescence of existing equipment.
(S, PS, TE)

293. Cameron, Clive A. ATTITUDES OF GRAPHIC ARTS FIRMS TOWARDS THE METRIC STANDARD. Rochester Institute of Technology, NY. Graphic Arts Research Center. 1971, 12p. $2.00, paper Report No. 140

Order from: Rochester Institute of Technology
Graphic Arts Research Center
One Lomb Memorial Drive, Rochester, NY 14623

Survey results useful for manufacturing, communications, and media related occupations. Respondents believe metrication is inevitable. 82% believe increased metric usage would be in best interests of U.S. and favor either a voluntary or mandatory national program of metrication. Many feel there will be disadvantages to their firms. Representative statements of personal or corporate policy appended.
(PS, TE)

294. Hatos, Stephen L. COMMERCIAL WEIGHTS AND MEASURES. U.S. METRIC STUDY INTERIM REPORT. National Bureau of Standards, Washington, D.C. 1971, 102p. $1.00, paper SD Catalog No. C13.10:345-3

U.S. Metric Substudy Reports, NBS SP345-3.

Order from: Superintendent of Documents
U.S. Government Printing Office, Washington, D.C. 20402

Also from: ERIC (ED 070 832)

Report exploring impact of metrication on commercial weights and measures activities. Information on conversion costs and effects upon local and state legislative activities.
(S, PS, A, TE)

295. Sellers, Robert C., ed. THE EXECUTIVE'S GUIDE TO PLANNING TRANSITION TO THE METRIC SYSTEM. Robert C. Sellers & Associates, Inc., Floral Park, NY. 1973, 248p. $17.25, loose leaf binder

Order from: Robert C. Sellers & Associates, Inc.
131 Tulip Avenue, Floral Park, NY 11002

Book divided into 25 sections. Designed to assist management at all levels to understand changeover to SI; identify problem areas, point out decisions to be made and provide alternatives for consideration. Describes problems peculiar to mechanical engineering firms, construction industry, energy industry, packaged consumer goods industry, materials industry, and electrical industry.
(S, PS, TE)

296. Groner, Alex; Boehn, George. GOING METRIC: AN AMA SURVEY REPORT. American Management Association, New York, NY. 1973, 38p. $7.50, paper

Order from: American Management Association
135 West 50th Street, New York, NY 10020

Material gathered for report from survey of 5500 businessmen, primarily production and engineering managers. Questions include use of metric measurements, familiarity with metric. Contents include highlights and conclusions, metric system in U.S., a search for a simple language, how U.S. business feels about metrication, conversions, prefixes, estimated conversion costs.
(S, PS, TE)

297. Cameron, Clive A. GOING METRIC WITH THE U.S. PRINTING INDUSTRY. Rochester Institute of Technology, NY. Graphic Arts Research Center. 1972, 175p. $8.70, paper

Order from: Graphic Arts Research Center
Rochester Institute of Technology
Rochester, NY 14623

Book on metric conversion for printing and graphics industry. Useful for education, government, and industrial policy-makers and planners. Contains chapters on historical and political evolution of measurement; commentary on conversions in Britain and Japan; sections on metric systems applications in paper and packaging, typesetting, and machinery and equipment; as well as findings of a survey on attitudes of graphic arts firms toward the metric standard. Has related tables and graphics.
(S, PS, TE)

298. Perica, Louis. IMPACT OF METRIC CONVERSION ON TECHNICAL COMMUNICATION. METRIC CONVERSION PAPER 5. American National Metric Council, Washington, D.C. 1974, 10p.

$2.00, paper; $7.00 for 4 copies of the same title or other of the five titles in the Metric Conversion Papers Series.
ANMC subscribers: $1.50, paper; $5.00 for 4 copies.

Order from: American National Metric Council
1625 Massachusetts Avenue, N.W., Washington, D.C. 20036
(202) 232-4545

Paper includes introduction to SI metric system, explanation of terms such as "metrication," "SI metric system," "soft and hard conversion," plus examples of SI units. Several controversies concerning current metric practices are presented. Discusses specific problems in engineering drawing and technical illustration.
(S, PS, TE)

299. Yeager, Earl T., and others. THE IMPACT OF METRICATION ON THE U.S. NATURAL GAS INDUSTRY. American Gas Association, Arlington, VA. 1971, 22p. $4.00, paper Catalog No. L31971

Order from: American Gas Association, Order Dept.
1515 Wilson Blvd., Arlington, VA 22209

Results of a study of potential impact of metrics on the gas industry. Assessment of implications of metrication and potential impact on production, transmission, distribution, and utilization. Discusses engineering and industrial standards, hardware and software needs, education and training, maps, and records.
(PS, TE)

300. Gordon, Gerald F. INTERNATIONAL TRADE. U.S. METRIC STUDY INTERIM REPORT. National Bureau of Standards, Washington, D.C. 1971, 173p. $1.50, paper SD Catalog No. C 13.10:345-8

U.S. Metric Substudy Reports, NBS SP345-8.

Order from: Superintendent of Documents
U.S. Government Printing Office, Washington, D.C. 20402

Also from: ERIC (ED 070 833)

Evaluation of potential effect of U.S. conversion to the metric system on foreign trade. Based on survey of exporters and importers of (1) machine tools, (2) steel, (3) air conditioning and refrigeration, (4) industrial pump and compressor, (5) industrial fastener, (6) electronic computing, and (7) construction machinery and equipment.
(S, PS, TE)

301. Pearson, Jack W. THE LIVERMORE PLAN: MANAGING THE INDUSTRIAL TRANSITION TO METRIC. University of California, Livermore. Lawrence Livermore Laboratory. 1974, 13p. and unnumbered figure pages Single copies free, paper Order No. UCLR-75486

Order from: Jack W. Pearson
L 140, P. O. Box 808
Livermore, CA 94550

Also from: National Technical Information Service
5285 Port Royal Road, Springfield, VA 22151

$2.25, microfiche; $3.00, paper; Order No. UCRL-75486

Report describing plan for transition to metric system in an engineering, design, fabrication, and testing laboratory. Useful for manufacturing-related occupations, in a job-shop environment, such as engineering, design, drafting, machine shop, metal fabrication, testing, and drafting.
(S, PS, TE)

302. MANAGING METRICATION. A GUIDEBOOK FOR MANAGERS AND STANDARDS ENGINEERS FACED WITH QUESTIONS ABOUT METRICATION. Standards Engineers Society, Minneapolis, MN. Minnesota Section. 3rd ed., 1973, 48p. $2.50, paper

$2.00 each for 2-24 copies. Discounts available on orders of 25 or more copi

Order from: Standards Engineers Society, Minnesota Section
P. O. Box 1181, Minneapolis, MN 55440

Guidebook contains summary of pending bills in Congress. Lists resource materials on metrication. Topics include: status of metrication, what you can do now, metric education and training, standards documentation, dual dimensioning, phases of change in product, stock control, costs, and appendices.
(S, PS, TE)

303. Barbrow, L. E., coordinator. THE MANUFACTURING INDUSTRY. U.S. METRIC STUDY INTERIM REPORT. National Bureau of Standards, Washington, D.C. 1971, 141p. $1.25, paper SD Catalog No. C 13.10:345-4

U.S. Metric Substudy Reports, NBS SP 345-4.

Order from: Superintendent of Documents
U.S. Government Printing Office, Washington, D.C. 20402

Also from: ERIC (ED 070 831)

Report of study to assess impact of past, present, and future metric usage on U.S. manufacturing industries. Study based on response from over 2,000 companies concerning their experience with the metric system, views on conversion, and cost impact.
(S, PS, TE)

304. METRIC CONVERSION IN ENGINEERING AND MANUFACTURING. American National Metric Council, Washington, D.C. 1974, 136p. $10.00, paper

$7.50 for American National Metric Council subscribers.

Order from: American National Metric Council
1625 Massachusetts Avenue, N.W., Washington, D.C. 20036

Edited transcript of December 1973 meeting of representatives of American National Metric Council, National Bureau of Standards and 15 leading manufacturing companies. Topics include dual dimensioning, rounding methods, uses of the computer, timing, vendor interface, and standards. Appendix includes formal policy statements by companies and related metric conversion materials.
(S, PS, TE)

305. A METRIC GUIDE. (Pamphlet) The Asphalt Institute, College Park, MD. 1974, 11p. Free, paper Information Series No. 165 (IS-165)

Order from: The Asphalt Institute
Asphalt Institute Building, College Park, MD 20740

Pamphlet presenting factors for converting from customary to metric those units of measurement most likely to be encountered in the pavement construction industry.
(S, PS, TE)

306. Frost, Douglas V., and others. METRIC HANDBOOK FOR HOSPITALS. (Pamphlet) U.S. Metric Association, Inc., Boulder, CO. 1971, 12p. $.50 Order No. 7057

$4.50 for package of 10.

Order from: Ideal School Supply Company
11000 South Lavergne Avenue, Oak Lawn, IL 60453

Handbook outlining steps necessary for metric conversion in hospitals. Topics covered: metric units and symbols, reasons for hospital metrication, learning the metric system, procedure for hospital conversions, clinical thermometer, and metric doses with apothecary equivalents
(S, PS, TE)

307. Barbrow, Louis E. THE METRIC SYSTEM AND SMALL BUSINESS. Small Business Administration, Washington, D.C. 1972, 11p. Free, paper Management Aids No. 214

Order from: Small Business Administration
Washington, D.C. 20416

Also from: ERIC (ED 078 155)

Summary of findings of U.S. Metric Study for owner-manager of small businesses. Series of steps suggested to keep businessmen alert to current metrication developments. Suggested references listed for further information.
(S, PS, TE)

308. METRICATION–COST CONSIDERATIONS. METRIC CONVERSION PAPER 2. American National Metric Council, Washington, D.C. 1974, 23p.

$2.00, paper; $7.00 for 4 copies of the same title or other of the five titles in the Metric Conversion Papers Series.
ANMC subscribers: $1.50, paper; $5.00 for 4 copies.

Order from: American National Metric Council
1625 Massachusetts Avenue, N.W., Washington, D.C. 20036
(202) 232-4545

Two articles discuss variables for determining costs of metrication: "Cost Implications of Increasing Metric Usage," by Dr. Lewis Branscomb and "The Financial Aspect of Metrication in the UK," by Dr. James Barnes.
(S, PS, TE)

309. "Metrication in Building." Building Research, v10 n1, 44p., January/March 1974. $9.00, paper

Proceedings of the "Metrication in Building Design, Production, and Construction" conference, held in Washington, D.C., November 27, 1973.

Order from: BRAB Building Research Institute, National Research Council
2101 Constitution Avenue, N.W., Washington, D.C. 20418

Collection of conference papers on metrication in building design, production, and construction. Discusses implications, costs, legislation, and conversion strategies. Reports conversion experiences of the construction industry in Canada, United Kingdom, and Australia. Reference materials for construction industry occupations.
(S, PS, TE)

310. METRICATION–PROBLEMS AND OPPORTUNITIES. METRIC CONVERSION PAPER 4. American National Metric Council, Washington, D.C. 1974, 23p.

$2.00, paper; $7.00 for 4 copies of the same title or other of the five titles in the Metric Conversion Papers Series.
ANMC subscribers: $1.50, paper, $5.00 for 4 copies

Order from: American National Metric Council
1625 Massachusetts Avenue, N.W., Washington, D.C. 20036
(202) 232-4545

Concerns for problems and opportunities in metrication are discussed in three articles: "Small Business and Metric Conversion," by John J. Motley III, "How Labor Views Metrication," by Thomas A. Hannigan, and "Business Opportunities with the Advent of Going Metric," by Robert C. Sellers.
(S, PS, TE)

311. Cornog, June R; Bunten, Elaine D. NONMANUFACTURING BUSINESSES. U.S. METRIC STUDY INTERIM REPORT. National Bureau of Standards, Washington, D.C. 1971, 184p. $1.50, paper SD Catalog No. C 13.10:345-5

U.S. Metric Substudy Reports, NBS SP345-5.

Order from: Superintendent of Documents
U.S. Government Printing Office, Washington, D.C. 20402

Also from: ERIC (ED 070 841)

A report on the experiences and views of more than 2500 nonmanufacturing businesses concerning the pace of metrication in a variety of fields, as well as past or present metric usage, attitudes toward metrication, and estimated costs and benefits of metric adoption.
(S, PS, TE)

312. ORIENTATION FOR COMPANY METRIC STUDIES (MECHANICAL PRODUCTS INDUSTRY). American National Standards Institute, New York, NY. Metric Advisory Committee. 2nd ed., Rev. 1970, 7p. $1.00, paper

$.90 each for 2-9 copies; $.80 each for 10-49 copies; $.70 each for 50-99 copies. Discounts available on orders of 100 or more copies. Part of ANSI's seven volume metric package, available for $5.50.

Order from: American National Standards Institute
1430 Broadway, New York, NY 10018

Preparatory information developed by ANSI Metric Advisory Committee for those companies in the mechanical products industry who would be requested to make an in-depth study of their firms by National Bureau of Standards' Metric Study Group during 1970. Calls attention to problem areas relating to establishment of metric standards.
(S, PS, TE)

313. Wolff, Ernst. PLANNING THE METRIC PRODUCT. American Society of Agricultural Engineers, St. Joseph, MI. 1971, 10p. $3.50, paper Paper No. 71-552

Order from: American Society of Agricultural Engineers
P. O. Box 229, St. Joseph, MI 49085

Paper on planning and scheduling conversion to a metric product in an industry. Describes experiences and procedures for developing planning data at a U.S. plant in Scotland. Includes survey questionnaires for customers and suppliers, internal survey report, financial studies, and a network analysis model leading to new metric products.
(S, PS, TE)

314. PREPARING NOW TO GO METRIC. Research Institute of America, Inc., New York, NY. 1974, 48p. $8.00, paper (Orders must be prepaid)

Order from: The Research Institute of America, Inc.
Research Institute Building
589 Fifth Avenue, New York, NY 10017

Topics include: management guidelines for going metric, sources of information, publications, organizations, overview of metric education strategy, costs, metric design in engineering, metrication flow chart, and hard and soft conversions. Tells how to formulate a step-by-step conversion program. Emphasis on metrication in the manufacturing industry.
(S, PS, TE)

315. SI METRIC: REFERENCE MANUAL FOR THE INTERNATIONAL SYSTEM OF UNITS. International Business Machines Corp., White Plains, NY. 2nd ed., 1973, 67p. $1.40, paper Order No. SR23-3725-1

Order from: IBM Educational Center
24445 Northwestern Hwy., Southfield, MI 48075

IBM Personnel reference manual for conversion to metric. Selected topics include: terminology, definition of SI base units, supplementary and derived units, use of SI prefixes, characteristics of certain units, computational techniques, conversion factors, and physical constants. Contains notes on precision machine tool conversion.
(S, PS, TE)

316. SI METRIC: STYLE MANUAL FOR THE INTERNATIONAL SYSTEM OF UNITS. International Business Machines Corp., White Plains, NY. Date unknown, 7p. $.50, paper Order No. SR23-3723-0

Order from: IBM Educational Center
24445 Northwestern Hwy., Southfield, MI 48075

Guideline for IBM personnel illustrating use of SI units in written materials. Content covers punctuation, spelling, usage and format, SI base units, supplementary units, derived units with special names, prefixes of SI units, and derived units without special names.
(S, PS, TE)

317. THE SWING TO METRIC. General Motors Corp., Detroit, MI. Personnel Communications Dept. Date unknown, 14p. Free, paper

Order from: Personnel Communications Department
General Motors Corporation
Detroit, MI 48226

Easy-to-read pamphlet on background, growth, principles, applications, and impact of metrication at General Motors. Discusses basic units and approximate relationships between inch-pound and metre-gram systems.
(S, PS, TE)

318. Fairweather, Leslie; Sliwa, Jan A. VNR METRIC HANDBOOK. Van Nostrand Reinhold Co., New York, NY. 2nd ed., 1972, 206p. $6.95, paper

Order from: Van Nostrand Reinhold Company
A Division of Litton Educational Publishing, Inc.
Litton Industries
450 West 33rd Street, New York, NY 10001

Handbook for British architects converting to metric system. Reference for construction and manufacturing occupations. Includes introduction to metric system; design standards for materials and products; dimensional drawings of humans, animals, and commercial, public and farm buildings, sport facilities, machines, furniture, toys, etc. Detailed dimensions and standards for housing, heating and lighting. Tables and conversion factors for stresses, loadings, and densities of materials.
(S, PS, TE)

319. THE WHOLE WORLD IS GOING METRIC. Machinery Publications Corp., New York, NY. 1971, 36p. $3.00, paper

Order from: Machinery Publications Corporation
200 Madison Avenue, New York, NY 10016

Articles reprinted from Machinery Magazine. Titles include "Metrication Let's Get At It," "We Can't Lick 'Em So We'd Better Go Metric Soon," "The World's Going Metric. Parts I, II, III, IV," "Consumer Oriented Industries Are Going Metric," and "Conversion Tables." Oriented to vocational teachers.
(S, PS, TE)

IMPACT ON CONSUMERS

320. Rothrock, Bruce D., ed. THE CONSUMER. U.S. METRIC STUDY INTERIM REPORT. National Bureau of Standards, Washington, D.C. 1971, 139p. $1.25, paper SD Catalog No. C13.10:345-7

U.S. Metric Substudy Reports, NBS SP 345-7.

Order from: Superintendent of Documents
U.S. Government Printing Office, Washington, D.C. 20402

Also from: ERIC (ED 070 842)

Survey report presents information on U.S. consumers' knowledge of metric system, attitudes and opinions regarding metrication in the U.S., and effects of worldwide metric usage on selected areas of consumer concern. Papers by experts on areas of consumer interest, such as buying consumable and non-consumable goods, food labeling, food preparation, repair and servicing, and advertising.
(S, PS, A, TE)

321. METRICATION—THE CONSUMER IMPACT. METRIC CONVERSION PAPER 3. American National Metric Council, Washington, D.C. 1974, 24p.

$2.00, paper; $7.00 for 4 copies of the same title or other of the five titles in the Metric Conversion Papers Series.
ANMC subscribers: $1.50, paper; $5.00 for 4 copies.

Order from: American National Metric Council
1625 Massachusetts Avenue, N.W., Washington, D.C. 20036
(202) 232-4545

Three articles discussing impact of metrication on the consumer: "Consumers and Metrication," by Jean A. Phillips, "The Modern International Metric System and Sears," by George Green, and "Metric Packaging in the Wholesale and Retail Food Industry," by Gordon A. Goodrich.
(S, PS, A, TE)

INTERNATIONAL SYSTEM OF UNITS (SI)

322. LeMaraic, A. L.; Ciaramella, John P., eds. THE COMPLETE METRIC SYSTEM WITH THE INTERNATIONAL SYSTEM OF UNITS. "SI" Abbey Books, Somers, NY. Rev. 1973, 184p. $7.95 Order No. 913006

Order from: Abbey Books
Metric Media Book Publishers
P. O. Box 266
Somers, NY 10589
(914) 248-5522

Technical reference describing development and definition of SI and other metric units as set by various international standardization groups. Has specific historical references, physical constants, conversion factors, units of measurement, and related tables.
(S, PS, A, TE)

323. Page, Chester H.; Vigoureux, Paul. THE INTERNATIONAL SYSTEM OF UNITS (SI). National Bureau of Standards, Washington, D.C. 1972 ed., 42p. $.30 SD Catalog No. C13.10:330/2

NBS Special Publication 330, 1972 edition. Translation of "Le Systeme International d'Unites," publication of the International Bureau of Weights and Measures.

Order from: Superintendent of Documents
U.S. Government Printing Office, Washington, D.C. 20402

Also from: ERIC (ED 075 227)

Commonly known as "NBS 330," booklet defines modernized metric system (SI). Contains resolutions and recommendations of General Conference on Weights and Measures, as well as International Organization for Standardization (ISO) on practical use of the system.
(S, PS, A, TE)

324. METRIC EDITORIAL GUIDE. American National Metric Council, Washington, D.C. 1974, 10p.

$1.50, paper; $.75 each for 10-99 copies; $.50 each for orders of 100 or more copies. ANMC subscribers: $1.00, paper; $.50 each for 10-99 copies; $.35 each for orders of 100 or more copies.

Order from: American National Metric Council
1625 Massachusetts Avenue, N.W., Washington, D.C. 20036

Set of recommendations serving as interim guide to "accepted metric practices." Section on rules for writing metric quantities covers: capitals, plurals, decimal point, grouping of numbers, spacing, compound units, and using the word "per." Separate sections on everyday metric units and symbols, SI unit prefixes, and typewriting recommendations.
(S, PS, A, TE)

325. METRIC PRACTICE GUIDE. American Society for Testing and Materials, Philadelphia, PA. 1972, 34p. $1.50, paper ASTM Designation: E 380 - 72e

Order from: American Society for Testing and Materials
1916 Race Street
Philadelphia, PA 19103

Commonly known as "ASTM E 380," makes detailed presentation on SI units and symbols, rules for SI style and usage, rules for conversion and rounding. Appendices on terminology, development of SI units, and conversion factors. This latest revision of the practice guide includes all current base and derived SI units, approved deviation from SI, and several sections expanded and rewritten for greater clarity.
(S, PS, A, TE)

326. METRIC UNITS OF MEASURE. (Pamphlet) U.S. Metric Association, Inc., Waukegan, IL. 11th ed., 1972, 11p. $.40 Publication No. 7055

$3.50 for 10 copies.

Order from: Ideal School Supply Co.
11000 South Lavergne Avenue
Oak Lawn, IL 60453

Reference pamphlet on metric system. Includes introduction to metric units, brief history of the metric system and legislative metric progress in the U.S., advantages of metric system adoption, table of SI base, supplementary, and derived units, and selected references.
(S, PS, A, TE)

327. Sellers, Robert C. REFERENCE HANDBOOK FOR THE PROPER USAGE OF METRIC SI IN SCIENCE AND ENGINEERING. Robert Sellers & Associates, Inc., Floral Park, NY. 1974, 59p. paper

Order from: Robert Sellers & Associates, Inc.
131 Tulip Avenue
Floral Park, NY 11002

Reference handbook outlining proper use of SI units. Topics include: base units, supplementary units, multiples and sub-multiples, derived units, decimal system as a family tree, practical units vs. preferred units, speed, velocity, acceleration, electrical units. Examples of problems.
(S, PS, A, TE)

328. SI METRIC. THE INTERNATIONAL SYSTEM OF UNITS. International Business Machines Corp., White Plains, NY. Date unknown, 12p. $.90, paper Order No. SR23-3727-2

Order from: IBM Educational Center
24445 Northwestern Hwy.
Southfield, MI 48075

Presents general introduction to IBM Metrication Program and history and development of metric system. SI metric base units, supplementary units, and derived units defined and described.
(S, PS, TE)

329. Adams, Herbert F. R. SI METRIC UNITS: AN INTRODUCTION. McGraw-Hill Book Co., New York, NY. 1974, p. unknown $3.95, paper

Order from: McGraw-Hill Book Company
1221 Avenue of the Americas
New York, NY 10020
(212) 917-1221

Book contains history of measurement, explanations of units comprising the International System, problems, solutions, and conversion tables. Other topics include: multiples and sub-multiples, everyday associations, length, area, volume, weight, angle, time, temperature, force, heating, construction, electrical calculations, and "What to Expect Along with SI Units."
(S, PS, A, TE)

330. Chiswell, B.; Grigg, E.C.M. SI UNITS. John Wiley & Sons Australasia Pty. Ltd., Sydney (Australia). 1971, 116p. $3.95, paper

Order from: John Wiley & Sons, Inc.
605 Third Avenue
New York, NY 10016
(212) 867-9800

Technician level reference text covering physical quantities and symbols, and basic and derived SI units for physical quantities. Emphasis given to use of prefixes and rules for use of SI units. Features sets of tables of physical quantities with symbols and definitions of SI and other permitted units. Appendix provides conversion tables and other technical reference material.
(PS)

331. SI UNITS AND RECOMMENDATIONS FOR THE USE OF THEIR MULTIPLES AND OF CERTAIN OTHER UNITS. International Organization for Standardization, Geneva (Switzerland). 1st ed., 1973, 21p. $1.50, paper Ref. No. ISO 1000-1973 (E)

Quantity discounts available.

Order from: American National Standards Institute
1430 Broadway
New York, NY 10018

Publication ISO 1000, the International Standard describing SI. Identifies SI units, their use, their multiples, use of non-SI units. Gives examples of decimal multiples and sub-multiples of SI units and some other units. Covers space and time, frequency, mechanics, heat, electricity and magnetism, light and related electromagnetic radiations, acoustics, physical chemistry and molecular physics.
(S, PS, A, TE)

332. Chisholm, L. J. UNITS OF WEIGHT AND MEASURE. INTERNATIONAL (METRIC) AND U.S. CUSTOMARY. National Bureau of Standards, Washington, D.C. 1967, 215p. $2.25, paper
SD Catalog No. C12.10:286

National Bureau of Standards Miscellaneous Publication 286.

Order from: Superintendent of Documents
U.S. Government Printing Office, Washington, D.C. 20402

Technical reference on SI metric base units, supplementary units, and derived units. Illustrates conversion factors for various units of measurement in metric and customary. Has 225 pages of tables of equivalents for length, mass, capacity, and area for metric and U.S. customary systems.
(S, PS, A, TE)

333. Mettler, Albert J. THE CELSIUS TEMPERATURE SCALE. (Pamphlet) Canadian Metric Association, Fonthill, Ontario. Date unknown, 6p. $.25 CMA Publication No. 20

$1.25 for 10 copies; $7.00 for 100 copies. Orders for less than $10.00 must be prepaid.

Order from: Canadian Metric Association
P. O. Box 35, Fonthill, Ontario LOS 1EO, Canada

Reference pamphlet for metric education. Defines temperature, describes effects on inanimate substances, presents brief history of the thermometer, describes advantages of the Celsius scale, presents Celsius scale terminology, and provides a Celsius-Fahrenheit conversion table.
(S, PS, TE)

334. CONVERSION OF OPERATIONAL AND PROCESS MEASUREMENT UNITS TO THE METRIC (SI) SYSTEM. American Petroleum Institute, Washington, D.C. 1974, 57p. $4.00, paper API Publication 2564

Order from: American Petroleum Institute
1801 K Street, N.W., Washington, D.C. 20006

Booklet oriented to petroleum industry. Topics include: brief background report on development of SI and its legal status, purpose and use of tables developed for use by petroleum industry, and conversion tables. Temperature conversion chart, information processing, bibliography, and references appended.
(PS, TE)

335. Semioli, William J.; Schubert, Paul B. CONVERSION TABLES FOR SI METRICATION. Industrial Press, Inc., New York, NY. 1974, 460p. $10.00

Order from: Industrial Press, Inc.
200 Madison Avenue, New York, NY 10016

Book for engineers and those in related occupations. Contents include: introduction to SI, extensive list of useful conversion factors, 37 conversion tables with introduction for more common SI and English units, and a refresher on using powers of ten. Tips with illustrative examples and diagrams on how to use SI decimal system for multiples and submultiples.
(PS)

336. Vogel, Christine N. Govoni. HOW TO . . . CONVERT THE METRIC SYSTEM INTO THE U.S. SYSTEM AND VICE VERSA. Vogel Book Co., Bellevue, WA. 3rd ed., 1974, 170p.

$3.95 plus $.18 postage, paper; $7.90 plus $.26 postage for 2 copies.
Discounts available for orders of 3 or more copies.

Order from: Vogel Book Company
P. O. Box 103, Bellevue, WA 98009
(206) 455-0973

Reference book of conversions. Topics include: length, area, volume, density, agrarian surfaces (sic), firewood, weight, capacity, temperature, time, velocity, force, work, watt, power, clothing sizes, household measures and weights, formulas for conversion and rules for computing.
(S, PS, A, TE)

337. INCH/MILLIMETER CONVERSION TABLES. Clark Equipment Co., Buchanan, MI. 1969, 64p. $2.00 Bulletin No. CEP-4-1969

Order from: Clark Equipment Company
324 East Dewey, Buchanan, MI 49107

Tables for conversion from inches to millimetres with ranges from 1/64 inch to 10 inches; 4 decimal place values.
(S, PS, TE)

338. INSTANT 2-WAY CONVERSION. ENGLISH/METRIC. E. Joe Penn, Indianapolis, IN. 5th ed., 1973, 39p. $2.00, paper

$1.80 each for 10-19 copies; $1.60 each for 20-49 copies. $1.50 each for 50 or more copies. The 6th edition (with 127 additional pages) is available for: $8.00 each for 1-3 copies; $7.50 each for 4-6 copies; $7.00 each for 7-9 copies; $6.50 each for 10 or more copies.

Order from: E. Joe Penn
4910 Carson Avenue, Indianapolis, IN 46227

Manual of two-way metric conversion tables. Detailed for those working to .001 inch and .1mm increments. Includes tables for mass, volume, linear measure, tap drill sizes, fractional inches, temperature, mileage, culinary conversion, linear force, pressure/tension/stress, work/energy/heat, and power.
(S, PS, TE)

339. Green, Marvin H. INTERNATIONAL AND METRIC UNITS OF MEASURE. Chemical Publishing Co., Inc., New York, NY. 1973, 107p. $12.50 Stock No. R 1533

Order from: Chemical Publishing Company, Inc.
200 Park Avenue South, New York, NY 10003

Reference on units of measurement and their conversion factors. Topics include: angular measure, area, atomic energy units, density and concentration, electrical units, energy, flow, force, length, magnetic units, mass, power, pressure, time, velocity, volume, systems of units, and comparison of international and U.S. customary units.
(PS)

340. IPS/MKS QUICK READING U.S.–METRIC CONVERSION TABLES OF CUSTOMARY UNITS FOR MECHANICAL ENGINEERS. Clark Equipment Co., Buchanan, MI. 1972, unnumbered. $2.00 Bulletin No. CEP-5-1972

Order from: Clark Equipment Company
324 East Dewey, Buchanan, MI 49107

Reference booklet for mechanical engineers. Tables for: area, energy, length, mass, pressure, stress, temperature, force, torque, power and volume. Includes appropriate metric units.
(PS)

341. Lewis, G. E. D. METRIC AND OTHER CONVERSION TABLES. Longman Inc., New York, NY. 1973, 91p. $5.00, regular edition; $2.50, pocket edition

Order from: Longman, Inc.
72 Fifth Avenue, New York, NY 10011

Reference of conversion tables, based on International System of Units (SI), and prepared for British users. Contains detailed conversion tables for length, area, volume, yield, angle, velocity, mass, mass per unit area, specific volume, volume rate of flow, density, force, pressure-stress, energy-work, power, temperature, and heat.
(S, PS, TE)

342. THE METRIC CONVERSION PLANNER. Brown & Sharpe, North Kingstown, RI. 1974, 41p. $.10, paper

Order from: Metric Planning, Brown & Sharpe
Industrial Products, North Kingstown, RI 02852
(401) 884-3000

Pocket-size booklet on the metric system, conversion of measuring units, and reading of metric measuring devices for craftsmen and machinists. Twenty-one pages of tables for dual conversion of fractions of an inch, decimals, and millimetres, for values less than a metre. Instructions on reading vernier and micrometer scales. Thirteen pages catalog and illustrate guages and devices available from company.
(S, PS, TE)

343. METRIC CONVERSION TABLES. Babcock & Wilcox Co., Beaver Falls, PA. Date unknown, 46p. $1.00, paper Bulletin T-18A

Order from: The Babcock & Wilcox Company
Tubular Products Division, Beaver Falls, PA 15[illegible]0

Book contains metric units and abbreviations for units of length, area, mass [weight], liquid volume, and temperature. Metric conversion explained. Tables include weights of tubing in pounds per foot and kilograms per metre; fractions of an inch and decimal equivalents to millimetres; inches to millimetres; metres to feet; pounds to kilograms; ounces to grams; and mass, volume, and capacity comparisons.
(S, PS, TE)

344. Horton, Holbrook L.; and others. METRIC CONVERSION TABLES AND FACTORS. Industrial Press Inc., New York, NY. 1973, 35p. $2.50, paper, spiral-bound

Order from: Industrial Press Inc.
200 Madison Avenue, New York, NY 10016

Handbook of tables for engineers, designers and draftsmen. Tables for English-metric conversion and vice versa. Covers linear, square and cubic measure, mass, pressure and stress, density, power, energy, and force. Over 180 conversion factors. Includes description of SI, together with details of units.
(S, PS, TE)

345. STARRETT METRIC CONVERSION DATA. L. S. Starrett Co., Athol, MA. 1973, 24p. $.15, paper Bulletin No. 1208, Issue No. 1

Order from: The L. S. Starrett Company
Athol, MA 01331

Also from: Local Starrett distributors.

Reference booklet from industry for machine-shop occupations. Synthesizes past and current developments in metrication; relates linear measurement to machinists, toolmakers and inspectors; describes tool gradations; illustrates how to read micrometers and gauges; exhibits metric tools available from this supplier; and provides two-way conversion tables for converting fractional inches to decimals and millimetres.
(S, PS, TE)

346. Chisholm, L. J. UNITS OF MEASUREMENT. CONVERSION FACTORS AND SPECIAL TABLES. Department of Commerce, Washington, D.C. 1972, 8p. Free, paper

Reprinted from NBS Miscellaneous Publication No. 286, May 1967.

Order from: Metric Information Office
National Bureau of Standards, Washington, D.C. 20234
(202) 921-2658

Reprint of selected metric conversion factors and special tables from "Units of Weight and Measure - Definitions and Tables of Equivalents" (NBS-M286). Covers units of length, mass, capacity or volume, area, and decimal fractions of an inch.
(S, PS, A, TE)

347. U.S.–METRIC CONVERSION SYMBOLS AND FACTORS. Pohs Shop, Denver, CO. 1972, 54p. $2.00, paper Publication No. PS-2

Order from: Henry A. Pohs
4537 Quitman Street, Denver, CO 80212

Booklet covers: length, weight [mass], area, volume, cooking domestic items, distance, pressure, power, torque, temperature, speed, acceleration, common conversions, and flow rates.
(S, PS, A, TE)

348. WEIGHT TABLES/ENGLISH & METRIC. FITTINGS, FLANGES, PIPE, TUBING. The Babcock & Wilcox Co., Beaver Falls, PA. Date unknown, 19p. $1.00, paper Bulletin T-21

Order from: The Babcock & Wilcox Company
Tubular Products Division, Beaver Falls, PA 15010

Bulletin providing direct-reading conversions from customary to metric units for ANSI B36.10 pipe dimensions and weights, ASTM A-234 welding fittings and forged steel flanges. Metric equivalents for all standard pipe sizes and schedules, also weights in pounds per foot and kilogram per metre.
(S, PS, TE)

349. WEIGHTS AND MEASURES: U.S. TO METRIC, METRIC TO U.S. Ronnigen Metric Co., Paradise Valley, AZ. 1969, 74p.

Order from: Ronnigen Metric Company
6102 Palo Cristi, Paradise Valley, AZ 85253

Book of conversion tables covering: area, energy, length, temperature, pressure, volume, mass [weight], pipe flanges, and clothing sizes.
(S, PS, TE)

NATIONAL AND INTERNATIONAL STANDARDS

350. Friesth, E. R. DESIGN PROBLEMS IN METRICATION. American Society of Agricultural Engineers, St. Joseph, MI. 1971, 13p. $3.50, paper Paper No. 71-551

Paper presented at the 1971 Winter Meeting of the American Society of Agricultural Engineers.

Order from: American Society of Agricultural Engineers
P. O. Box 229, St. Joseph, MI 49085
(616) 983-6521

Paper on metrication in engineering design technology for manufacturing occupations. Describes drafting practices and notation, product specifications for agricultural machinery, commercial practices in purchasing raw materials during the conversion period, related ANSI and ISO standards, component purchasing problems, and recommendations for industry conversion.
(S, PS, TE)

351. Stiehler, Robert D. ENGINEERING STANDARDS. U.S. METRIC STUDY INTERIM REPORT. National Bureau of Standards, Washington, D.C. 1971, 250p. $2.00, paper SD Catalog No. C 13.10:345-11

U.S. Metric Substudy Report, NBS SP345-11.

Order from: Superintendent of Documents
U.S. Government Printing Office, Washington, D.C. 20402

Also from: ERIC (ED 069 883)

Report comparing U.S. engineering standards with other national and international standards. Relationship between measurement language and engineering standards is discussed, as well as compatibility of U.S. standards with corresponding international standards. Has appendices on ISO recommendation R 1000, ASTM E380-70, Compatibility of Screw Threads and a progress report of Industrial Fasteners Institute.
(S, PS, TE)

352. GUIDE TO IMPACT OF METRIC USAGE ON STANDARDS DEVELOPMENT OF COMPANIES, TRADE ASSOCIATIONS, TECHNICAL & PROFESSIONAL SOCIETIES. American National Standards Institute, New York, NY. Standards Development Subcommittee. Date unknown, 5p. $1.00, paper Order No. SR4

$.80 each for 10-49 copies; $.70 each for 50-99 copies. Discounts available for orders of 100 or more copies. Part of ANSI's seven volume metric package, available for $5.50.

Order from: American National Standards Institute
1430 Broadway, New York, NY 10018

Paper presenting guidelines for metric conversion by organizations developing standards, and professional and technical societies. Includes suggested procedures, definitions, initial considerations, cost projection techniques, and re-training suggestions.
(PS, TE)

353. Sidders, P. A., ed. GUIDE TO WORLD SCREW THREADS. Industrial Press Inc., New York, NY. 1969, 318p. $13.50

Order from: Industrial Press Inc.
200 Madison Avenue, New York, NY 10016
(212) 889-6330

Reference for machine shop and manufacturing occupations. Extensive diagrams, tables, and standards for screw production and use. Includes ISO metric threads. Describes international standards for screws, and references on-going efforts (in 1969) to develop additional standards.
(S, PS, TE)

354. Knapp, W. E. HOW WE PROPOSE TO HANDLE METRICS IN OUR STANDARDS. American Society of Agricultural Engineers, St. Joseph, MI. 1973, 15p. $1.50, paper Paper No. 73-5537

Paper presented at the Winter 1973 meeting of the American Society of Agricultural Engineers.

Order from: American Society of Agricultural Engineers
P. O. Box 229, St. Joseph, MI 49085
(616) 983-6521

Pamphlet on proposed standards for metric conversion in agricultural engineering. Includes SI base and derived units, rules for notation, conversion techniques, rules for rounding, conversion factors for customary and metric units, and a sample dual-dimensioned drawing. Clear, concise style.
(S, PS, TE)

355. Eastman, Robert M. INTERNATIONAL STANDARDIZATION. University of Missouri, Columbia. Extension Division. 1974, 4p.

Single copies free, paper. $.10 each for additional copies.
Engineering Science and Technology Guide, EG 40C1.

Order from: Publications, 205 Whitten Hall
University of Missouri, Columbia, MO 65201

An Engineering Science and Technology Guide on international standardization. Topics include: history of standardization, procedures for setting standards, role of American National Standards Institute, problem areas of international standardization, and resolving differences.
(S, PS, TE)

356. INTERNATIONAL STANDARDS. U.S. METRIC STUDY REPORT. National Bureau of Standards, Washington, D.C. 1970, 145p. $1.25, paper SD Catalog No. C 13.10:345-1

U.S. Metric Substudy Reports, NBS SP 345-1.

Order from: Superintendent of Documents
U.S. Government Printing Office, Washington, D.C. 20402

Also from: ERIC (ED 070 829)

Conclusions and recommendations aimed at strengthening the effectiveness of the United States in international standards activities. Includes study advisory panel membership and questionnaires used.
(S, PS, TE)

357. Dunn, Arthur D. NOTES ON THE STANDARDIZATION OF PAPER SIZES. Arthur D. Dunn, Ottawa, Ontario (Canada). 1968, 54p. $3.50, paper

Order from: The Orema Company
Box 5032, Station F, Baseline Road
Ottawa K2C 3H3 Ontario, Canada

Booklet introduces use of international paper sizes. Outlines opportunities that exist as a result of standardization and suggests adoption by industry. Facts and figures concerning ISO paper sizes, including information on envelope sizes, microfilm sizes, and printed booklet sizes.
(S, PS, TE)

358. RULES FOR SAE USE OF SI (METRIC) UNITS. Society of Automotive Engineers, Inc., New York, NY. 1973, 5p. $2.75 for non-members, paper

Order from: Society of Automotive Engineers, Inc.
400 Commonwealth Drive, Warrendale, PA 15096
(412) 776-4841

SAE Technical Committee Guide establishing recommended practice for use of SI units in SAE reports, recommendations, and standards. Content describes units approved and not approved for use as SI, multiplying prefixes, precision in the conversion of values, conversion factors, and SI units for SAE use. (S, PS, TE)

359. USE OF CUSTOMARY AND SI (METRIC) UNITS. American Society of Agricultural Engineers, St. Joseph, MI. Metric Policy Subcommittee. Rev. 1973, 5p. $2.00, paper ASAE Recommendation: ASAE R285.1

Order from: American Society of Agricultural Engineers
P. O. Box 229, St. Joseph, MI 49085

Leaflet specifying preferred SI metric units, symbols, and notation for ASAE standards, engineering practices, and data. Includes SI base, supplemental and derived units, prefixes, conversion techniques and factors, and a sample dual-dimens on drawing.
(S, PS, TE)

BIBLIOGRAPHIES

360. A BIBLIOGRAPHY OF METRIC STANDARDS. American National Standards Institute, Inc., New York, NY. 1974, 20p. Free, paper Order No. SP 11a

Part of ANSI's seven volume metric package, available for $5.50.

Order from: American National Standards Institute, Inc.
1430 Broadway, New York, NY 10018

Listing of approximately 335 documents on metric standards that are recognized currently by the American National Standards Institute (ANSI), the International Organization for Standardization (ISO), the International Electrotechnical Commission (IEC), and the International Commission on Rules for the Approval of Electrical Equipment (CEE).
(S, PS, TE)

361. BIBLIOGRAPHY ON THE METRIC SYSTEM: INSTRUCTIONAL MATERIALS. Indiana Dept. of Public Instruction, Indianapolis. Division of Instructional Media. 1974, 35p. Free in limited quantities, paper

A revised version is now in progress.

Order from: Metric Consultant
Division of Instructional Media
Indiana Department of Public Instruction
120 West Market Street—10th floor
Indianapolis, IN 46204

Annotated bibliography, referencing a variety of materials available for metric education. Indexed by types of materials including charts, 8mm films, 16mm films, filmstrips, games, kits, posters, recordings, slides, transparencies, miscellaneous items, printed materials, and government documents. Addresses of suppliers provided. Grade levels, primary through adult.
(S, PS, A, TE)

362. Carr, Edwin, ed. CATALOG OF METRIC INSTRUCTIONAL MATERIALS. American Institutes for Research, Palo Alto, CA. Metric Studies Center. 1974, 55p.

$1.50, paper, for pre-paid orders; $2.00 with billing.

Order from: Metric Students Center, American Institutes for Research
Box 1113, Palo Alto, CA 94302

An indexed bibliography of metric instructional materials, including purpose, cost, and source. Indexed by measuring devices, student activity cards, charts and posters, student workbooks, teacher manuals, filmstrips, metric kits, games, overhead transparencies, rods, block sets, geoboards, metric grids, and plastic templates.
(S, PS, A, TE)

363. Brandou, J. A COLLECTION OF MATERIALS AND IDEAS ON . . . METRIC EDUCATION. Michigan State University, East Lansing. Science and Mathematics Teaching Center. 1974, 52p. $3.00, paper

Order from: Science and Mathematics Teaching Center
Michigan State University
Publications Office, College of Education
Erikson Hall
East Lansing, MI 48824

Reviews and evaluates metric books, articles, government publications, textbooks, workbooks, films, filmstrips, charts, posters, and instructional kits. Ordering information is provided. Includes two articles on: (1) legal and professional aspects of teaching metric and (2) ideas on teaching measurement.
(S, PS, A, TE)

364. Lange, Ernst. INFORMATION ON THE METRIC SYSTEM AND RELATED FIELDS. National Aeronautics and Space Administration, Washington, D.C. George C. Marshall Space Flight Center. 6th ed., 1974, 274p. $2.25, paper (must be pre-paid)

Order from: U.S. Metric Association
Sugarloaf Star Route
Boulder, CO 80302

Compendium of (1) books, reports, and pamphlets, (2) periodical articles and papers, (3) periodicals, (4) metric legislation, (5) motion pictures, (6) filmstrips, slides, and transparencies, (7) metrication posters, (8) education and training courses, (9) addresses of information sources, (10) tool, instrument and component sources, and (11) consultants.
(S, PS, A, TE)

365. THE METRIC SYSTEM. Baker & Taylor Co., Momence, IL. Audio Visual Services Div. 1974, 10p. $1.00, paper

Baker & Taylor Audio Visual Quick List series.

Order from: The Baker & Taylor Company, Audio Visual Services Division
P. O. Box 230, Momence, IL. 60954

Approximately 90 titles of audio-visual materials on metric system. Titles listed alphabetically within grade level. Price, producer, release date and content summary provided.
(S, PS, A, TE)

366. ONE TO GET READY. A SELECTED BIBLIOGRAPHY ON METRICATION. (Pamphlet) Joint Committee of the American Association of School Librarians/National Council of Teachers of Mathematics, Chicago, IL. 1973, 10p. $.20, paper

Order from: American Association of School Librarians
50 East Huron Street
Chicago, IL 60611

Unique fold-out brochure, one metre long, with metric scale along edge, lists resources for metric education. Bibliographic entries categorized as: metrication aids, films and filmstrips to preview, professional journal articles, materials from the Superintendent of Documents, and references for parents.
(S, PS, A, TE)

367. Williams, Robert. SME BIBLIOGRAPHY ON METRIC SYSTEM. Society of Manufacturing Engineers, Dearborn, MI. 1974, 21p.

$2.50, paper; $1.75 for members of the Society. A $3.00 minimum order is required. SME Technical Paper, IQ74-999.

Order from: Society of Manufacturing Engineers, Publications Sales
20501 Ford Road, Dearborn, MI 48128

Selective bibliography contains title, source, and cost of materials. Includes U.S. Metric Study Report series, American National Standards Institute publications, and other government- and industy-produced books and reports. Lists metric periodical publications, curriculum materials, metric education aids and devices, training films and filmstrips, slides, and videotapes. Lists suppliers of metric tools, measuring instruments, and drafting equipment.
(S, PS, A, TE)

368. SOME REFERENCES ON METRIC INFORMATION WITH CHARTS ON: ALL YOU NEED TO KNOW ABOUT METRIC, METRIC CONVERSION FACTORS. National Bureau of Standards, Washington, D.C. 1973, 11p. $.25, paper SD Catalog No. C13.10:389

NBS Special Publication 389.

Order from: Superintendent of Documents
U.S. Government Printing Office, Washington, D.C. 20402

Also from: ERIC (ED 090 025)

Contains bibliographic and ordering information for metric publications produced by the National Bureau of Standards and the American National Standards Institute (ANSI). Includes list of metric materials suppliers compiled by the National Council of Teachers of Mathematics (NCTM), and other contact sources.
(S, PS, A, TE)

369. SUPPLIERS OF METRIC MATERIALS FOR EDUCATORS. National Council of Teachers of Mathematics, Reston, VA. 1974, 11p. Free (single copies only), paper

Order from: National Council of Teachers of Mathematics
1906 Association Drive, Reston, VA 22091
(703) 620-9840

List of 158 suppliers of metric instructional materials. Addresses are included. The list is indexed by grade levels (elementary, intermediate, secondary, and post-secondary) and by types of material (books, workbooks, films, filmstrips, and so on).
(S, PS, A, TE)

SECTION THREE:

RESOURCE LISTS

SECTION THREE:

RESOURCE LISTS

This section contains four kinds of lists designed to meet the further information needs of users.

The Directory of Publishers and Suppliers includes companies that have a variety of resource materials such as scales, rulers, calipers, films, charts, books and other instructional aids. Many of these companies can provide supplemental resources, other than those cited in the bibliography.

The State and Local Resource Persons list provides the names and addresses of individuals who are involved in metric education in each of the states.

U.S. Organizations: Their Periodicals and Metric Resources lists professional associations and journal publishers who produce metric-related articles and materials. Contact addresses and subscription information is included.

Foreign Metric Conversion Boards and Associations: Their Periodicals and Resources lists those agencies responsible for metric conversion in their countries. Many of these organizations are also concerned with the development of metric standards. These agencies can be contacted for publication lists and often supply free pamphlets.

DIRECTORY OF PUBLISHERS AND SUPPLIERS

Abbey Books Metric Media Book Publishers P.O. Box 226 Somers, NY 10589	Books, charts and posters, instructional aids
Acme Ruler Company Limited Foster Street P.O. Box 239 Mount Forest, Ontario Canada N06 210	Measuring devices and equipment
Acme United Corporation 100 Hicks Street Bridgeport, CT 06609	Instructional aids
Addison-Wesley Publishing Company, Inc. 2725 Sand Hill Road Menlo Park, CA 94025	Books, duplicating masters, filmstrips, games, instructional aids, reports and pamphlets, workbooks
Aero Educational Products Limited P.O. Box 71 St. Charles, IL 60174	Instructional aids, kits
Aims Instructional Media P.O. Box 1010 Hollywood, CA 90028	Films, filmstrips
Akron Rule Corporation 59 Hoag Avenue Akron, NY 14001	Measuring devices and equipment
Allyn and Bacon, Inc. 470 Atlantic Avenue Boston, MA 02210	Books, workbooks
Alvin and Company, Inc. P.O. Box 188 Windsor, CT 06095	Charts, instructional aids, kits
American Book Company 450 West 33rd Street New York, NY 10001	Books, charts and posters, periodicals, reports and pamphlets, workbooks
Paul S. Amidon & Associates, Inc. 4329 Nicollet Avenue South Minneapolis, MN 55409	Books, instructional aids
A/V Instruction Systems P.O. Box 191 Somers, CT 06071	Books, charts

Babcock & Wilcox Company Tubular Products Division Beaver Falls, PA 15010	Bulletins, conversion devices
Baker & Taylor Company 6 Kirby Avenue Somerville, NJ 08876	Audio-cassettes, books, charts and posters, film loops, films, filmstrips, instructional aids, kits, slides and transparencies
Balla & Company 3494 N. Ocean Blvd. Fort Lauderdale, FL 33308	Books, charts and posters, instructional aids, workbooks
Bell & Howell Audio Visual Products Division 7100 McCormick Road Chicago, IL 60645	Duplicating masters, instructional aids, kits
Channing L. Bete Company, Inc. 45 Federal Street Greenfield, MA 01301	Kits, reports and pamphlets
BFA Educational Media 2211 Michigan Avenue Santa Monica, CA 90404	Films, filmstrips, instructional aids, kits
Dick Blick P.O. Box 1267 Galesburg, IL 61401	Audio-cassettes, instructional aids, kits, pamphlets, slides and transparencies
BMI 23358 Hartland Street Canoga Park, CA 91307	Instructional aids
British Distribution Services 403 Kennedy Blvd. Somerdale, NJ 08083	Measuring devices and equipment, pamphlets
British Information Services 845 Third Avenue New York, NY 10022	Films
Broadhead-Garrett 4560 East 71st Street Cleveland, OH 44105	Filmstrips, industrial supplies, instructional aids, kits, transparencies
Brooks/Cole Publishing Company 540 Abrego Street Monterey, CA 93940	Books
Brown & Sharpe Manufacturing Company Industrial Products North Kingstown, RI 02852	Measuring devices and equipment, pamphlets
Bruning Division of Addressograph Multigraph Corporation 1834 Walden Office Square Schaumburg, IL 60172	Drafting tools, metric charts

C-Thru Ruler Company 6 Britton Drive Bloomfield, CT 06002	Converters, measuring devices and equipment
Central Instrument Company Division of Impex Instrument Corporation 900 Riverside Drive New York, NY 10032	Books, charts and posters, instructional aids
Clearvue Inc. 6684 North Oliphant Avenue Chicago, IL 60631	Audio-cassettes, films and filmstrips, kits
John Colburn Associates, Inc. 1215 Washington Avenue Wilmett, IL 60091	Slides and transparencies
The Cooper Group P.O. Box 728 Apex, NC 27606	Measuring devices and equipment, reports and pamphlets
Coronet Instructional Media 65 East South Water Street Chicago, IL 60601	Books, films
Weber Costello Company 1900 N. Narragansett Avenue Chicago, IL 60639	Audio-cassettes, instructional aids
Creative Publications, Inc. P.O. Box 10328 Palo Alto, CA 94303	Books, charts and posters, instructional aids
Cuisenaire Company of America 12 Church Street New Rochelle, NY 10805	Books, instructional aids, workbooks
Dawson Films 7025 Oakland Lane Fort Worth, TX 76118	Audio-cassettes, filmstrips, kits
A.R. Davis & Company P.O. Box 24424 San Jose, CA 95154	Books, charts and posters, games, instructional aids, kits
Denoyer-Geppert Audio-Visuals 355 Lexington Avenue New York, NY 10017	Charts and posters, instructional aids, slides and transparencies
Dominie Pty Limited 8 Cross Street Brookvale, Australia 2100	Books, charts and posters
East Inc. P.O. Box 13375 University Station Gainesville, FL 32604	Instructional aids
Edmund Scientific Company 101 E. Gloucester Pike Barrington, NJ 08007	Books, charts, instructional aids, kits

Educational Activities P.O. Box 392 Freeport, NY 11520	Filmstrips, kits, records
Educational Metrics Corporation 207 Sunset Blvd. Blackburg, VA 24060	Kits, reports and pamphlets
Educational Products 1211 W. 22nd Street Oak Brook, IL 60521	Instructional aids, kits, reports and pamphlets
Educational Teaching Aids 159 W. Kinzie Street Chicago, IL 60610	Instructional aids, kits
Educulture, Inc. 1220 Fifth Street Santa Monica, CA 90406	Audio-cassettes, workbooks
Enrich 3437 Alma Street Palo Alto, CA 94306	Charts and posters, instructional aids, kits
Foley Manufacturing Company Housewares Division 3300 5th Street, N.E. Minneapolis, MN 55418	Measuring cups and spoons
Gamco Industries, Inc. P.O. Box 1911 Big Spring, TX 79720	Audio-cassettes, books, charts and posters, filmstrips, instructional aids, slides and transparencies
Goldstar 3 Parkway Center, Suite 109 Pittsburgh, PA 15220	Pocket cards, wall charts
Graphic Calculator Company 234 James Street Barrington, IL 60010	Instructional aids
Great Ideas, Inc. P.O. Box 274 Commack, NY 11725	Workbooks
Great Plains National Instructional Television Library Box 80669 Lincoln, NE 68501	Books, video-cassettes
Hearlihy & Company 714 W. Columbia Street Springfield, OH 45501	Instructional aids
Hobar Publications 1305 Tiller Lane St. Paul, MN 55112	Instructional aids, kits, transparencies
Houghton Mifflin Company One Beacon Street Boston, MA 02107	Audio-cassettes, books, charts and posters, filmstrips, workbooks

IBM Old Orchard Road Armonk, NY 10504	Books, charts and posters, instructional aids
Idaho Research Foundation, Inc. P.O. Box 3367, University Station Moscow, ID 83843	Books, workbooks
Ideal School Supply Company 11000 South Lavergne Avenue Oak Lawn, IL 60453	Charts and posters, instructional aids, reports and pamphlets, workbooks
Industrial Press, Inc. 200 Madison Avenue New York, NY 10016	Books
Instructional Fair, Inc. 4158 Lake Michigan Drive Grand Rapids, MI 49504	Books, duplicating masters, instructional aids
Instructor Publications Instructor Park Dansville, NY 14437	Books, charts and posters, duplicating masters, instructional aids
International Tutors 22303 Devonshire Street Chatsworth, CA 91311	Audio-cassettes, filmstrips, kits
Janus Associates P.O. Box 96 Wethersfield, CT 06109	Slides and transparencies
Jem Innovations 4568 East 45th Street Tulsa, OK 74135	Charts and posters
J.J. Keller & Associates, Inc. 145 W. Wisconsin Avenue Neenah, WI 54956	Books, periodicals
Kelm Manufacturing Company 3151 U.S. 33 North Benton Harbor, MI 49022	Converters, kits
Kent Educational Services P.O. Box 903 Oviedo, FL 32765	Games, workbooks
Laidlaw Brothers Thatcher and Madison River Forest, IL 60305	Workbooks
LaPine Scientific Company 6001 S. Knox Avenue Chicago, IL 60629	Charts, measuring equipment and devices
Lawhead Press, Inc. 900 East State Street Athens, OH 45701	Games
Learning Resource Center, Inc. 10655 S.W. Greenburg Road Portland, OR 97223	Instuctional aids, kits, workbooks

Leicestershire Learning Systems Box 335 New Gloucester, ME 04260	Instructional aids
Library Filmstrip Center 3033 Aloma Wichita, KS 67211	Audio-cassettes, filmstrips, slides and transparencies
Machine Design Penton Plaza 1111 Chester Avenue Cleveland, OH 44114	Books, charts and posters
MacLean-Hunter Limited 481 University Avenue Toronto, Ontario M5W 1A7 Canada	Books, instructional aids
Martin Instrument Company 19450 Grand River Avenue Detroit, MI 48223	Books, instructional aids, kits, rulers, transparencies
Math Group Inc. 5625 Girard Avenue South Minneapolis, MN 55419	Games, instructional aids, workbooks
Math Shop 5 Bridge Street Watertown, MA 02172	Books, charts and posters, instructional aids, kits, workbooks
Media Materials, Inc. 409 W. Cold Spring Lane Baltimore, MD 21210	Audio-cassettes, instructional aids, kits, workbooks
Charles E. Merrill Publishing Company Division of Bell & Howell Company 1300 Alum Creek Drive Columbus, OH 43216	Books, charts
Metric-Aids Limited 75 Horner Avenue Toronto, Ontario M8Z 4X7 Canada	Instructional aids, kits
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Metric Supply International 1906 Main Street Cedar Falls, IA 50613	Books, charts and posters, filmstrips, instructional aids, kits, periodicals, reports and pamphlets, workbooks
Metric Teaching Aids 2858 Carolina Avenue Redwood City, CA 94061	Slides and transparencies
Metrication Institute of America P.O. Box 236 Northfield, IL 60093	Films, instructiona aids, kits

Metric's Inc. 6140 Wayzata Blvd. Golden Valley, MN 55416	Charts and posters
Metrix Corporation P.O. Box 19101 Orlando, FL 32814	Games
Midwest Publications Company, Inc. P.O. Box 129 Troy, MI 48084	Books
Millimeter Industrial Supply Corporation 162 Central Avenue Farmingdale, NY 11735	Filmstrips, industrial supplies
Milmour Products, Inc. 8242 McCormick Blvd. Skokie, IL 60076	Measuring cup, instructional aids
Modern School Supplies High Street P.O. Box 958 Hartford, CT 06101	Charts and posters, instructional aids transparencies
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Multi-Media Publishing, Inc. 1601 S. Federal Blvd. Denver, CO 80219	Audio-cassettes, books, filmstrips, kits, slides, workbooks
McGraw Hill, Inc. 1221 Avenue of the Americas New York, NY 10020	Books, films, filmstrips
National Microfilm Association 8728 Colesville Road Silver Spring, MD 20910	Charts and posters, conversion devices
NBC Educational Enterprises 30 Rockefeller Plaza New York, NY 10020	Films
Ohaus Scale Corporation 29 Hanover Road Florham Park, NJ 07932	Measurement kits, metric cubes, scales
Parks and Math Company 954 Idlewood Drive San Jose, CA 95121	Books, workbooks
Pathescope Educational Films, Inc. 71 Weyman Avenue New Rochelle, NY 10802	Audio-cassettes, filmstrips, kits, workbooks
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Pickett Industries 17621 Von Karman Avenue Irvine, CA 92705	Instructional aids, kits
Polymetric Services 4600 Brewster Drive Tarzana, CA 91356	Books, charts and posters, film loops, filmstrips, instructional aids, kits, periodicals, workbooks
Rapidesign, Inc. Box 6039 Burbank, CA 91510	Instructional aids
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Regal-Beloit Corporation P.O. Box 38 South Beloit, IL 61080	Audio-cassettes, books, charts and posters, films, filmstrips, industrial supplies, instructional aids, kits, periodicals, reports and pamphlets, slides and transparencies
Reid Tool Supply Company 2233 Temple Street Muskegon Heights, MI 49444	Books, industrial supplies, instructional aids, kits
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Roe International, Inc. 217 River Avenue P.O. Box 471 Patchogue, NY 11772	Measuring tapes and rulers
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Safco Manufacturing, Inc. 6500 Depot Drive, Box 7898 Waco, TX 76710	Instructional aids
Sales Aids, Inc. 201 Bear Hill Road P.O. Box 522 Waltham, MA 02154	Instructional aids
Howard W. Sams & Company, Inc. 4300 West 62nd Street Indianapolis, IN 46268	Books
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Roy G. Scarfo, Inc. P.O. Box 217 Thorndale, PA 19372	Charts and posters
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Robert C. Sellers & Associates, Inc. 131 Tulip Avenue Floral Park, NY 11001	Books
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Spectrum Educational Supplies Limited 9 Dohme Avenue Toronto, Ontario M4B 1Y7 Canada	Instructional aids
Stanley Tools 600 Myrtle Street New Britain, CT 06050	Charts and posters, films, film loops, instructional aids, kits
The L.S. Starrett Company Athol, MA 01331	Industrial supplies, reports and pamphlets
Sterling Plastics Division of Borden, Inc. 253 Sheffield Street Mountainside, NJ 07092	Instructional aids, kits
Sterling Publishing Company 419 Park Avenue South New York, NY 10016	Books
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Summit International Corporation 180 West 2950 South Salt Lake City, UT 84115	Instructional aids
Teach'em, Inc. 625 N. Michigan Chicago, IL 60611	Audio-cassettes
Troubador Press 126 Folsom Street San Francisco, CA 94105	Books, instructional aids, workbooks
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Universal Education and Visual Arts 100 Universal City Plaza Universal City, CA 91608	Filmstrips

Universal Supply Company 1561 N. Bonnie Beach Place Los Angeles, CA 90063	Conversion calculators, rulers
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Visual Instruction Productions 295 W. 4th Street New York, NY 10014	Film loops, films, video-cassettes
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John Wiley and Sons, Inc. 605 Third Avenue New York, NY 10016	Books, workbooks
Willow House Publishers 111 N. San Joaquin Street Stockton, CA 95202	Books, workbooks
Willowdale Media, Inc. 12 Parfield Drive Willowdale, Ontario M2J 1B9 Canada	Audio-cassettes, filmstrips, kits, slides and transparencies, workbooks
Zelinda Machine & Tool Corporation 66-02 Austin Street Forrest Hills, NY 11374	Charts and posters, industrial supplies

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Mr. Lloyd M. Crook
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Atlanta, GA 30314
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Hawaii Dept. of Education
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Lake Bluff, IL 60044
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Chicago, IL 60639
(312) 637-5556

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American Home Economics Association 2010 Massachusetts Avenue, N.W. Washington, D.C. 20036	JOURNAL OF HOME ECONOMICS ($13.00 per year, non-members), also: kits, pamphlets.
American Industrial Arts Association 1201 Sixteenth Street, N.W. Washington, D.C. 20036	MAN/SOCIETY/TECHNOLOGY ($9.00 per year, non-members).
American Institutes for Research Metric Studies Center P. O. Box 1113 Palo Alto, CA 94302	AIR METRIC-GRAM ($6.00 per year, 5 issues), also: reports and pamphlets.
American National Metric Council 1625 Massachusetts Avenue, N.W. Washington, D.C. 20036	METRIC REPORTER ($25.00 per year, 24 issues), also: charts and posters, reports and pamphlets.
American National Standards Institute 1430 Broadway New York, NY 10018	ISO publications and metric standards.
American Technical Education Association 22 Oakwood Place Delmar, NY 12054 Phone: (518) 439-1190	TECHNICAL EDUCATION NEWS (available to members) contains metric articles and reviews of metric materials.
American Vocational Association 1510 H. Street, N.W. Washington, D.C. 20005 Metric Coordinator: Donald L. Rathbun	AMERICAN VOCATIONAL JOURNAL ($8.00 per year, non-members) features metric articles and information
AMJ Publishing Company Drawer L Tarzana, CA 91356	AMERICAN METRIC JOURNAL ($35.00 per year, 6 issues; $12.50 per year for members of U.S. Metric Association).
INDUSTRIAL EDUCATION Subscription Department P. O. Box 900 Cos Cob, CT 06807	Features metric articles and information ($7.00 per year).
INDUSTRIAL EQUIPMENT NEWS Thomas Publishing Company 1 Penn Plaza 250 W. 34th Street New York, NY 10001	"Metric News" department in monthly issues of the magazine beginning October 1974. Write for subscription information.
J. J. Keller and Associates, Inc. 145 W. Wisconsin Avenue Neenah, WI 54956	METRIC SYSTEM GUIDE BULLETIN ($30.00, monthly issues).
MACHINE DESIGN Penton Plaza 1111 Chester Avenue Cleveland, OH 44114	Journal features metric articles and information.

Machinery Publications Corporation 45 Crosby Street New York, NY 10012	MACHINERY features metric articles and information.
National Association of Industrial and Technical Teacher Educators c/o Floyd Krubeck Keanney State College Keanney, NE 68847 Phone: (308) 236-4392	JOURNAL OF INDUSTRIAL TEACHER EDUCATION ($5.00 per year for non-members, 8 issues) contains occasional metric articles.
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Superintendent of Documents Government Printing Office Washington, D.C. 20402	DIMENSIONS/NBS ($6.50 per year), also: other NBS publications.
National Business Education Association 1906 Association Drive Reston, VA 22091 Phone: (703) 860-0213	BUSINESS EDUCATION FORUM ($2.50 per single issue; $5.00 per year for members, 8 issues) features metric articles.
National Council of Teachers of Mathematics 1906 Association Drive Reston, VA 22091 Phone: (703) 620-9840	THE ARITHMETIC TEACHER ($9.00 per year, 8 issues), also: reports and pamphlets.
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Home Economics Education Association/NEA 1201 Sixteenth Street, N.W. Washington, D.C. 20036 Phone: (202) 833-4138	Newsletter (free to members, 4 issues per year) contains references to metric developments.
National Science Teachers Association 1742 Connecticut Avenue, N.W. Washington, D.C. 20009 Phone: (202) 265-4150	THE SCIENCE TEACHER ($15.00 per year) contains occasional metric articles, also: metric kits and packets, reports and pamphlets.
SCHOOL SHOP Box 623 416 Longshore Drive Ann Arbor, MI 48107	"METRICorner" column in monthly issues of the journal, beginning September 1974 ($8.00 per year).
Society of Manufacturing Engineers Metric Information Center 20501 Ford Road Dearborn, MI 48128	Books, workbooks, videotapes.

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Country	Periodicals and Resources
Australia	
The Metric Conversion Board P.O. Box 587, Crows Nest 18-24 Chandos Street St. Leonards, NSW 2065 Australia	MCB NEWSLETTER, METRIC NOTES, also: conversion plans, technical reports, training manuals, public information.
Standards Association of Australia Standards House 80-86 Arthur Street North Sidney, NSW 2060 Australia	Technical reports, industry standards information.
Canada	
Canadian Metric Association P.O. Box 35 Fonthill, Ontario, LOS 1EO Canada	NEWS LETTER (membership $5.00 per year), also: C.M.A. publications series.
Metric Commission Box 4000 Ottawa, Ontario, K1S 5G8 Canada	METRIC COMMISSION BULLETIN, METRIC MONITOR, also: conversion plans, technical reports, loan of training materials, public information.
Standards Council of Canada 178 Rexdale Blvd. Rexdale, Ontario M9W 1R3 Canada	CONSENSUS, STANDARDS CANADA, also: technical reports, industry standards information.
East African Community (Kenya, Uganda, Tanzania)	
East African Standing Committee on the Metric System P.O. Box 1003 Arusha, Tanzania	Conversion plans, technical reports, public information.
Great Britain	
British Standards Institution 2 Park Street London W1A 2BS England	Technical reports, industry standards information.

Country	Periodicals and Resources
Great Britain (Continued)	
Construction Industry Training Board (CITB) Radnor House London Road Norbury London SW16 England	Sector conversion plans, industry training manuals and materials.
Metric Information Service 189 Regent Street London W1R 7 WF England	METRIC NEWS AND BULLETIN (request rates on information services).
Metrication Board 22 Kingsway London WC2B 6LE England	GOING METRIC (Quarterly), also: conversion plans, technical reports, training manuals and materials, public information.
International	
International Standards Organization 1 Rue de Varembe 1121 Geneva 20 Switzerland	ISO publications and selected foreign materials available through the American National Standards Institute.
New Zealand	
Metric Advisory Board P.O. Box 10-243 The Terrace Wellington, New Zealand	METRIC ADVISORY BOARD, METRIC MEMO, also: conversion plans, technical reports, training manuals and materials, public information.
Standards Association of New Zealand Private Bag Wellington, New Zealand	NEW ZEALAND STANDARDS BULLETIN. also: technical reports, industry standards information
Rhodesia	
Metrication Council P.O. Box 8437 Causeway Salisbury, Rhodesia	TECHNICAL BULLETIN, also: conversion plans, technical bulletins, training manuals, public information.
Singapore	
Singapore Metrication Board Secretary, Metrication Board 1 Anson Road Singapore 2	METRICATION DIGEST, also: conversion plans, technical reports, public information.
Singapore Institute of Standards and Industrial Research 179 River Valley Road P.O. Box 2611 Singapore 1	Technical reports, industry standards information.

Country	Periodicals and Resources
South Africa	
Metrication Department South African Bureau of Standards Private Bag X191 Pretoria 0001, South Africa	SOUTH AFRICAN METRICATION NEWS, also: conversion plans, technical reports, training manuals and materials, public information.
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Other countries whose current metric activities have been reported in the literature:

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INDEXES

The Educational Level Indexes are a unique feature which organizes the materials cited in the bibliography into three special interest categories.

The Occupational Cluster Index is designed for vocational-technical educators who are seeking materials for their own program areas. It references those documents and materials which are relevant to a specific occupational cluster. Within each of the fifteen occupational clusters materials have also been categorized by grade level.

The General Metric Instructional Materials Index classifies those instructional materials, cited in Section I, which are useful for introducing and teaching general metric concepts. Materials are organized by type and education level.

The Adult Basic Education Index lists all instructional and reference materials which can be used by adult basic education students and teachers.

OCCUPATIONAL CLUSTER INDEX

Documents are indexed by related Occupational Clusters and Educational Levels. Numbers in the cells are document citation numbers which are listed serially in the bibliography. A document number may appear at more than one educational level.

OCCUPATIONAL CLUSTER	EDUCATIONAL	
	SECONDARY	POST-SECONDARY
Agri-Business & Natural Resources	75 186 235 241 257 275 300 350 354 359	75 171 186 235 241 257 299 300 334 335 350 354 359
Business & Office	104 181 186 257 289 316	104 106 181 186 257 289 316
Communication & Media	297 298 300 357	293 297 298 300 357
Construction	186 246 295 305 309 318 329 343 348 351 354	109 186 246 295 305 309 318 329 335 343 348 351 354
Consumer & Homemaking	4 22 24 26 42 60 67 83 84 87 92 100 194 198 211 212 213 228 238 244 245 247 249 320 321 333	52 60 83 194 213 228 238 245 247 249 320 321 333
Environmental Control	295 300 333 354	295 300 333 334 335 354
Fine Arts & Humanities		
Health Services	306 333	64 306 333
Hospitality & Recreation		
Manufacturing	4 67 74 76 98 104 155 183 184 286 235 238 241 247 248 251 257 287 292 295 296 300 301 302 303 304 307 312 313 314 315 316 317 318 325 327 328 329 342 343 344 345 348 350 351 353 354 357 358	20 74 76 89 90 98 104 106 107 108 171 183 184 186 209 235 238 241 247 248 251 257 267 279 287 292 295 296 300 301 302 303 304 307 312 313 314 315 316 317 318 325 327 328 329 334 335 342 343 344 345 348 350 351 353 354 357 358
Marine Science	354	335 354
Marketing & Distribution	104 186 235 241 257 295 302 321 348 350	104 106 171 186 235 241 257 295 302 321 348 350
Personal Services		
Public Services	257 269	257 269
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LEVEL		OCCUPATIONAL CLUSTER
TEACHER EDUCATION	ADULT BASIC EDUCATION	
75 171 186 235 241 257 275 299 300 334 350 354 359	75 275	Agri-Business & Natural Resources
106 181 186 257 289 316		Business & Office
161 293 297 298 300 357		Communication & Media
109 160 163 186 246 295 305 309 318 329 343 348 351 354	329	Construction
36 60 83 92 194 198 213 228 238 245 247 249 320 321 333	22 26 60 83 84 87 100 194 211 213 228 238 244 245 247 320 321	Consumer & Homemaking
295 300 333 334 354		Environmental Control
		Fine Arts & Humanities
306 333		Health Services
		Hospitality & Rescreation
20 74 76 89 90 106 107 108 157 160 162 163 171 183 184 186 209 235 238 241 247 248 251 257 267 279 287 292 295 296 300 301 302 303 304 307 312 313 314 315 316 317 318 325 327 328 329 334 342 343 344 345 348 350 351 353 354 357 358	238 247 248 287 325 327 329	Manufacturing
354		Marine Science
106 171 186 235 241 257 295 302 321 348 350	321	Marketing & Distribution
		Personal Services
257 269		Public Services
		Transportation

GENERAL METRIC INSTRUCTIONAL MATERIALS INDEX

Documents are indexed by type of material and educational level. Numbers in the cells are citation numbers which are listed serially in the bibliography. A document number may appear at more than one educational level.

INSTRUCTIONAL MATERIALS	EDUCATIONAL	
	SECONDARY	POST-SECONDARY
Instructor Guides	3 4* 6 9 12 13 15 18 19 21	18
Student Materials	29 30 31 32 34 35 38 39 43 44 45 46 47 48 49 50 51 53 55 58 63 65 66 67* 68 69 70 71 72 73 74* 76* 77 78 80 81 82 84* 85 86 87* 91 93 94 96 97 99 101 102	30 31 32 34 35 38 39 46 47 49 53 55 58 59 66 70 71 73 74* 76* 80 81 85 86 91 93 94 96 97 99 102
Films	103 104* 110 111 112 113 114 115 116 117 118 119 120 121	103 104* 105 110 113 114 115 117 118
Film Loops	122 123 124 125 126 127 128 129 130 131 132 133	
Videocassettes	134 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 153	134 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153
Filmstrips		
Transparencies, Transparency Masters, 35mm Slides	164 165 166 167 168 169 170	164 165
Audio-recordings	172 173 174 175 176	171*
Multimedia Kits	177 178 180 181* 182 183* 184* 185 186* 187 189 190 191 192 193 194* 195 196 197 199 200 201 202 203 204 205 206 207 208 210	179 180 181* 182 183* 184* 185 186* 187 194* 195 196 197 199 206
Charts and Posters	213* 214 215 216 217 218 219 220 221 222 223 224 225 226 227 229 230 231 232 233 234 235* 236 237 238* 239 240 241* 242 243 244*	213* 214 215 216 218 219 220 221 222 224 225 226 227 229 230 233 234 235* 236 237 238* 239 240 241* 242 243
Metric Converters, Devices	247* 250 251*	247* 250 251*

*Instructional materials also applicable to specific occupational clusters.

LEVEL												INSTRUCTIONAL MATERIALS
TEACHER EDUCATION						ADULT BASIC EDUCATION						
3	5	11	14	18	19	1	2	3	7	8	10	Instructor Guides
						11	12	15	16	17	18	
						19	23	25	27	28		
30	31	32	34	35	38	30	33	34	35	37	39	Student Materials
39	43	46	47	49	53	40	41	44	46	47	48	
55	56	57	58	70	71	49	51	54	55	58	61	
73	74*	76*	80	81	86	62	65	66	68	69	71	
88	91	93	96	97	99	73	78	79	80	81	82	
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						101	102					
109	110	113	114	115	117	103	110	113	114	115	117	Films
118												
												Film Loops
134	135	136	137	138	139	134	136	137	138	139	140	Videocassettes
140						141	142	143	144	145	146	
						147	148	149	150	151		
						154						Filmstrips
156	158	159	164			164	166	167	168	169		Transparencies, Transparency Masters, 35mm Slides
171*						172	173	174	175	176		Audio-recordings
180	181*	182	183*	184*	185	177	178	188	194*	195	196	Multimedia Kits
186*	187	194*	195	196	197	197	199	200	206			
199	200	206										
213*	214	215	216	218	219	213*	214	215	216	217	218	Charts and Posters
220	221	222	224	225	226	219	222	223	224	225	226	
227	229	230	233	234	235*	227	229	230	233	234	236	
236	237	238*	239	240	241*	237	238*	242	244*			
242	243											
247*	250	251*				247*	250					Metric Converters, Devices

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Documents applicable to Adult Basic Education are indexed by type of material. Numbers in the cells are document citation numbers which are listed serially in the bibliography.

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Films	103	110	113	114	115	117	
Videocassettes	134	136	137	138	139	140	141
	142	143	144	145	146	147	148
	149	150	151				
Filmstrips	154						
Transparencies, Transparency Masters, 35mm Slides	164	166	167	168	169		
Audio-recordings	172	173	174	175	176		
Multimedia Kits	177	178	188	194	195	196	197
	199	200	206	211			
Charts and Posters	213	214	215	216	217	218	219
	222	223	224	225	226	227	228
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